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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Prize Essay Read before the State Medical Society, on Difficult Labors and their Treatment.* By M. B. WRIGHT, M. D., of Cincinnati.

"True things instead of pleasant things."

The eagerness with which the professional mind has engaged in its search after undiscovered truth, or in its efforts to revive rejected opinions, has given it often a proclivity to extremes. These extremes, like opposite promontories of a great continent, are of little exclusive value. Their importance consists in the facilities and inducements they may have offered, for the exploration and cultivation of the space which lies between.

These remarks apply, not only to the Science of Medicine in general, but to its obstetrical department. General principles have been established as lights for our guidance, and the successful application of many has stamped them with a true value, but errors in practice were introduced at an early period, and have descended in almost every obstetrical work of which we have any knowledge. Our object in writing this Essay is to aid in the correction of some of these errors.

The least appearance of opposition to the announced opinions of distinguished Medical men, and the practice of their numerous followers, may give rise to the charge of presumption. But encouragement is given in the outset of our present undertaking, by the reflection, that truth contains as much intrinsic value expressed by those trudging along the humbler walks of the profession, as when inculcated by the Professor in his chair, or transferred from page to page throughout a long line of standard publications.

It will be admitted by those who have had a full share of experience in the treatment of difficult labors, that a few absolute rules cannot be applied successfully to every case. Much is necessarily left to the judgment and tact of the practitioner. While, therefore, nothing will be found in this paper of an arbitrary character, there will be an independent attempt to correct errors, to lesson the perplexities of the accoucheur, to mitigate suffering, and to save life.

A ready and successful management of difficult labors pre-supposes an intimate knowledge of those which are natural. And if by natural labors are understood those which terminate spontaneously, and without involving necessarily the safety of either mother or child, shoulder presentations may be considered the true type of unnatural or difficult labors, for they almost always demand extrinsic aid.

The satisfactory termination of difficult labors depends upon the correct adaptation of art to the principles of science. Traction is a mechanical act, but to be successful in delivery, it must be made in conformity with scientific details, with due regard to the relation of organs and tissues. The convex surface of the fœtus is correlative with the concave surface of the uterus. If they were inanimate, rigid bodies, the relations of their several parts could not be much changed unless the curved lines of the one, were moved along the curved lines of the other. Their partial flexibility does not exempt them from the operation of the same principle.

The uterus undergoing gradual distention by the growth of the fœtus, and by increase in the quantity of liquor amnii, is not from this cause alone excited to an expulsion of its contents. Let a strong and sudden mechanical force be applied to the fibres of the uterus, even to a limited extent, and contraction will speedily follow. If any portion of the fœtus should be pushed forcibly against the fundus of the uterus, by attempts to rectify a malpresentation, a more than corresponding resistance would soon apprise us of a want of adroitness, and the probabilities of failure. The hand of the manipulator in the vagina, imparts a sense of fulness, and induces expulsive efforts on the part of the mother. Pressure on the internal face of the perineum, or along the recto-vaginal septum, urges the uterus to renewed or more energetic action. Simple contact of the uterine and fœtal surfaces in turning, does not produce undue contraction of the uterine walls. The presence of the hand, added to that of the fœtus, within the uterus, is a common cause of irritation and expulsive force. But

the fact which we most desire to enforce here, is, that when the foetus, in the operation of turning, is moved in straight lines, and sensibly displaces the uterine fibres with which it comes in contact, it is speedily forced back to its original mal-position; nor can its displacement be easily rectified, except it be moved in conformity to the curvatures of the cavity in which it is contained.

Difficult labor, arising from the presence of either the right or left shoulder of the foetus, at the brim of the pelvis, is not common. Indeed, some prominent obstetricians know nothing of it from experience. He who refuses to examine its nature carefully, however, on this account, will find in the hour of trial, that he has been untrue to himself, and that the lives of confiding and beloved ones, are in double peril. Difficult labors, in truth, cannot be successfully managed without a knowledge of their character, not to say the possession of tact derived from experience. Without the one, he cannot exercise the other. In natural, a want of knowledge would be more excusable than in unnatural cases. The former may terminate favorably, in the midst of *inactive* ignorance; the latter *require action*, guided by an enlightened judgment. A man may justly congratulate himself that he has never been entrusted with the management of a difficult case of labor, but he should not cherish the belief, on this account, that his next case will not require special interference. With the present knowledge of the profession, it is impossible to determine the nature of a presentation from external appearance, or from the feelings of the pregnant woman. And it is hardly to be presumed, that a physician will examine all his patients during the progress of gestation, with a view to ascertain the kind of presentation he is to meet; admitting, that in some cases, the position of the foetus may be ascertained by manipulation through the walls of the abdomen, and by vaginal touch. Hence, the importance of being prepared to treat every case that may occur, in the best possible manner.

It has been claimed, that nature is adequate to the accomplishment of her own wise designs, and that shoulder presentations may be left with safety to the spontaneous action of the uterus. None, among the controlling spirits of our profession, have enforced this doctrine more strongly than Denman. He contended that by the alternate contractions of the uterus, the shoulder was moved from its position, until the head or breach occupied its place and became the fixed presentation. It may be admitted, indeed, we know, that the shoul-

der has receded, and the breech has subsequently presented in one case, and the head in the other. Hence the language of Dr. Denman—"spontaneous evolution of the foetus"—may still be retained.

At a subsequent period, Dr. Douglass, of Dublin gave a different explanation of the manner in which spontaneous delivery was accomplished in shoulder presentation. The accurracy of his views have been acknowledged by more recent writers, who have had opportunities for observation.

Dr. Churchill says, "the head and the shoulder depressed in the pelvis, are fixed. and the remainder of the body doubled up, is inch by inch forced into the pelvis, and through the external parts, until all below the arm is expelled, leaving the case to terminate as a breech or foot presentation. At no part of the process is the arm at all retracted; but if moved at all, it is still further protruded; the name of "spontaneous expulsion," given by Dr.Douglass, is therefore more suitable than that of "spontaneous evolution." Still, the question is not, whether spontaneous delivery is accomplished in these cases by "evolution," or "expulsion," but whether the physician should stand idle, and hope for delivery by the long continued agonies of his patient.

By reading the following quotation, some faint idea may be formed of the intense and protracted suffering to which a woman is subject, during "spontaneous expulsion," at full term.

"Immediately after the rupture of the membranes, the parts diminish in size by the compression they undergo. The first period is the analogue of flexion in the presentation of the vertex, of extension in that of the face, and of the lessening of the parts in the presentation of the pelvic extremity. Then the shoulder descends gradually, and, in proportion as it enters the excavation, it executes a movement of rotation, which places the head on the horizontal branch of the left pubis, and thence under the pubic arcade. After this movement the arm disengages, and passes out of the vulva; sometimes the expulsion of the arm takes place before this period. When the rotation is performed, the period of the descent of the trunk is complete; the side of the fœtus is pushed into the excavation by gliding on the right sacro-iliac symphysis, while the shoulder remains immovable. After the side, the pelvic extremity descends, which also pursues the same direction. Finally, the perineum distends, and then successively pass out at the anterior commissure of the perineum, the lateral and superior portion of the chest, the side properly so called, the hip and pelvic extremity. In proportion as these parts are delivered, the head and left arm enter

the excavation, but they are soon expelled, and, in most cases, the head does not undergo its movement of internal rotation. In a word, it presents at parts which have been excessively dilated, and it is not solicited by them to perform this movement of rotation. Such is the course pursued, when the dorsal surface of the fœtus corresponds to the surface of the pelvis."

Not only does a labor of this description require unparalleled voluntary efforts—not only does it involve extreme suffering of body and mind, but many patients have died before, or soon after delivery; and, alas, too many of those who may have survived, have found themselves entailed with incurable injury, or enfeebled general health.

This is not all. According to M. Velpeau, only twelve children were alive after "spontaneous expulsion," out of one hundred and thirty-seven labors.

It is almost certain from the statements of those in whose judgment we are bound to confide, that spontaneous expulsion cannot take place, even with the hazards already enumerated, except in cases where the fœtus is small, or the pelvis unusually capacious.

That a fœtus of full size may pass through the pelvis, the shoulder or side continuing as the presenting portion, without necessary injury to the mother, is proven by the painful details of the following case:

The patient was a young German woman, in labor for the first time. A shoulder presentation was detected at an early period by the midwife, first called in attendance, who, with uncommon prudence and forethought, suggested the necessity of an accoucheur more experienced and skillful than herself. A messenger was speedily despatched for a physician of their choice, who, soon after placing himself at the bedside of the patient, decided that the arm which had prolapsed was a leg. To expedite delivery, the arm was seized, and was made to sustain for a considerable time strong traction. Sufficient force, however, could not be applied by means of the naked hand to withdraw the child. A towel was interposed, and after repeated efforts and renewed energies, the arm, together with the clavicle and scapula, were torn from their attachments. This, to those present, was a new mode of proceeding, and not being exactly in accordance with their feelings or judgment, the doctor was requested to withdraw.

The physician next called, finding an unpromising state of affairs, invited us to share with him the responsibilities of the case. On our arrival at the house, we were informed that the fœtus had been expelled by spontaneous action. The midwife, who used her eyes as well as her hands, assured us, that one shoulder, and so much of the other as had been left, were born first and at the same time, and that the head and breech escaped also together. From an examination of the child, it seemed highly probable that the statements of the midwife were correct. As the pulling at the arm was increased, the shoulder descended more and more; and the neck of the child was stretched until the face reached the pelvis, and was compressed in the integuments between the crests of the ilia. There it remained imbedded, until our examination of it had been made. The child could not have weighed less than eight or nine pounds. The mother lived, and, as we understand, her convalescence was not protracted. We are informed by Dr. Dewees, that "spontaneous evolution" had never occurred in his practice, and yet, he says, "I should, therefore, recommend waiting for this 'spontaneous evolution,' whenever turning forbade the hope of saving the child, provided the labor be not complicated by either of the accidents enumerated."

To us, the lesson of Dewees is far from being satisfactory on this subject. Notice the language—"whenever turning forbade the hope of saving the child." Are we to allow the woman to suffer on and on, not because turning is difficult or impracticable, but because the child is dead? We cannot suppose this to have been the meaning of so distinguished a practitioner; for if it has become a settled doctrine, that the claims of the mother are paramount to those of the child, when both are alive, how much stronger are these claims when the latter is certainly dead.

Perhaps Dr. Dewees entertained, to their full extent, the views entertained by Denman, viz: that the shoulder receded from the brim of the pelvis, and that in time the head or breech assumed its place. Suppose he did believe in this change of position and presentation, it was simply a belief in a possibility. If a case had never occurred in the practice of a man of such unlimited experience, what just ground had he to hope that one would soon be presented? Would any other man be sustained in waiting thus, as a compliment to the doctrine of Denman? While we admit, with both these distinguished teachers, that "meddlesome midwifery is bad," we

greatly fear that tardy action has been followed by a large amount of evil.

Diagnosis.—At an early period of labor, the signs of shoulder presentation are somewhat negative. The membranes may be felt within the os uteri, but even when relaxed and admitting considerable pressure, the finger can detect nothing beyond. By and by, the os undergoing gradual expansion, the membranes protrude into the vagina. Our suspicions of a mal-presentation are increased; for, instead of feeling a broad surface of membranes, and through them a large, round unresisting body, they are in the shape of a loose. elongated bag. At length the os tincæ is fully dilated, but the presentation is no less obscure. Up to the present period, however, all this may frequently be said of the breech presentations, and occasionally those of the head.

The contractions of the uterus occasion a descent of the presentation, until it it can be felt at the superior strait. Now the mind is led to ask and answer questions. Is this the vertex? No. It is not hard enough, it has not sufficient circumference, nor has it sutures nor fontanels. Is it the breech? No. There is something that feels like the tuberosity of the ischium; there is no fissure, there are no genital organs. Is it a foot? No. There are no short toes—no malleoli; there is no heel. It cannot be the hand, for it is without long fingers, and there is absence of wrist, or well defined palm. Is it not the face? If it is, there is neither chin, mouth, nose, eyes, forehead. We will not say anything about the elbow, for if that be near, the shoulder cannot be far off. It must be the shoulder. The shape and size would so indicate—extending the finger upwards, either towards the pubis or sacrum, the axilla may be felt; on one side the clavicle is detected, on the other, the scapula, and during the exploration, the ribs and intercostal spaces will assist in the diagnosis.

These several parts are indistinct, while the membranes remain unruptured. After their rupture, the presentation descends and is more readily made out. At this time, also, the arm may be moved, which will strengthen our opinion still more. When the arm falls into the vagina, as it may by sudden rupture of the membranes under uterine contraction, or during an examination, there should not be left upon the mind a single doubt. It is true, the arm has been mistaken for a leg, and great mischief has been the result, but a careful examination of the hand will prevent errors of judgment on this point.

Great care has been enjoined upon us in our examination, lest the arm should be made to descend into the vagina, and prove an obstacle to successful turning. We regard it so little in the way, and so much under our control, that we have not hesitated in a case of doubtful presentation, to draw it down from the superior strait, and use it as a means of more certain diagnosis.

Causes.—Any attempt at a solution of the cause of shoulder presentation, would result in a mere waste of time. At best, we could arrive at nothing but conjecture, and our object in writing this paper is to present our views in as practical a form as possible. We may venture in passing, however, a few suggestions.

Among the several conditions to which shoulder presentations have been attributed, are the small size of the fœtus, a large accumulation of amniotic fluid, uterine obliquities, pelvic obliquity, long continued agitation of the body, sudden shocks, violent mental emotion, partial contraction of the uterine fibres. Most of these so-called causes are daily witnessed, and yet how rare are shoulder presentations.

At this point, we are inclined to adopt the language of Cazeaux, which is: "If we might be permitted to hazard an opinion, after so many others, we should unhesitatingly say, they have erred by seeking only in the fœtus, its form and structure, for the causes of those various positions, exhibited by it in the internal cavity." To engage earnestly in an examination respecting the cause of position of the fœtus, we should deem it necessary to embrace both the uterus and its contents.

When the ovum enters the uterine cavity, it is liable to be moulded to the shape of the cavity, (speaking mechanically) rather than to expand the uterus. From this moment, (if not before) the prominent functions of the uterus, are those of growth and development; the fundus, and that portion of the body nearest to it, remaining, as in the unimpregnated state, larger than the neck and inferior portion of the body. This is not to be attributed to a natural tendency in the uterus to uniform expansion only, but to the fact that the placenta is in the upper portion of the cavity, and demands that the cavity should be here more expanded, than where its contents are less.

The embryo is, at the same time, becoming more and more developed. During the first few weeks it is suspended in the liquor amnii by means of the umbilical chord. At this period, the cephalic extremity being heavier than the pelvic, (however much we may agree with M. Dubois when the *fœtus* had become fully developed,) is most

dependent, and until it reaches the bottom of the membranes, is subject the laws of gravity. Afterwards, the uterus will be found to have adapted itself, in all its diameters, to those of the *fœtus*, which the *embryo* has now become.

We see then, how the vertex becomes *naturally* the presentation, and it is easy to admit that Madame Boivin had 19,810 vertex, out of 20,517 presentations, that Madame Lachapelle observed the same 14,677 times in 15,652 cases, that Dr. Jos. Clarke had 10,387 cases, and out of this number 9,746 with the head in advance, and that Collin's record is correct in giving 15,912 head presentations, in 16,414 labors.

Vertex presentations, therefore, may be justly considered as in accordance with a general law, and all others as violations of this law, just as placenta previa is a departure from the physiological principle, that the placenta should be attached near the uterine extremity of the fallopian tube, and just as utero-gestation is sometimes earlier, sometimes later than the natural period of 280 days.

In shoulder, and in breech presentations, the transverse is often so much longer than the vertical diameter of the uterus, that it is visible, and gives rise to the exclamation, in respect to the woman, what a singular and ugly shape she has! May not shoulder presentations be owing to an early and too rapid expansion of the neck of the uterus, giving to the foetus much room for motion, and subjecting it to influences, which in more natural cases, would have no effect in changing its position?

In considering shoulder presentations, even to a limited extent, several questions very naturally arise.

1. In what manner can a change of presentation be accomplished most easily and successfully?

2. What mode of proceeding will prove most favorable for the mother?

3. How may the life of the child be best preserved?

4. Can any mode of delivery be relied on exclusively?

Two modes of delivery, besides those to which we have already alluded, have been described by obstetrical writers, viz: *podalic version*, or turning by the feet, and *cephalic version*, or turning by the head. Strictly speaking, however, cephalic *version* is not performed, i. e. if *version* and *turning* be considered as they generally are, synonymous terms. When to expedite labor, we substitute the head for the shoulder, we simply remove one part, that the other may occupy

its place. And we should not allow the sudden impression of a name, to direct our minds into an improper course of proceeding, or we may say, into an attempt to accomplish that which is impossible. Podalic version, on the contrary, is not only a change of the presenting part, for the feet, but the actual turning of the head, most of an entire circle.

We shall endeavor to answer these questions in the order presented. The first question embraces the general principles of turning, and may be considered the foundation of the whole subject before us. It would afford us much pleasure and cause for exultation, if we could refer to American authorities for full and correct views upon turning, connected with shoulder presentations. For a moment, however, we must bring them before us.

In "Dewees' Midwifery" we find no instructions upon the management of shoulder presentation by cephalic version.

After giving a short quotation from one of the early authors, Prof. Meigs remarks: "It may be that those old practitioners of the days of Queen Elizabeth may have sometimes succeeded by pushing up the presenting shoulder, in getting the head at last to come to the strait again, but such an event appears to me in any case most improbable."

Professor Huston, in a note, to be found in "Churchill's System of Midwifery," says: "The practitioner will experience great difficulty, and most likely fail in attempting to bring down the head in a favorable position when the shoulder presents. I am satisfied from considerable experience that when the arm, shoulder, breast, back or side is the presenting part, it is better to bring down the feet at once, while the condition of the uterus is favorable for turning than to waste time in attempting to restore the head."

Professor Bedford, who had been induced to translate and edit "Dr. Chailly's Treatise on Midwifery," is silent upon the subject of cephalic version in shoulder presentations.

Professor Miller uses the following language: "Cephalic version has but few advocates at the present day, and is confessedly applicable to such a limited number of cases that it is scarcely worthy of our formal consideration. For this reason, and because I have no experience of it, I shall confine my observations to pelvic version. Again, it is manifest that all attempts forcibly to pass the hand between a powerfully contracted uterus, and the foetus, must be extremely painful and may cause fatal rupture of the organ. The

only resort is mutilation of the child, either by eviscerating its trunk, to enable the operator to extract it doubled upon itself, in imitation of the natural process of duplication, or by decapitating it in order that the body and head may be separately extracted."

We hope to satisfy those who may follow us to the end of our paper, that evisceration is not the sad alternative to which we must resort in those cases in which podalic version is impracticable. Some attention, however, must be given to those European authors, whose opinions and teachings are now before us.

To facilitate turning by the feet, Dr. Churchill recommends the use of the lancet, tart. antimony, and opium. He then adds, "should these measures fail, and version be impracticable, we must open the chest of the child, and eviscerate, after which it may be extracted by the crotchet."

Three modes of turning are given by Dr. Ramsbotham, viz: by the feet, the breech and the head. In transverse presentations, he claims "of these three modes, that of raising the shoulder and bringing down the head would be the safest for the child, because there would then be little chance of pressure on the funis umbilicalis, and it is that pressure which usually destroys the foetus, when extracted by the breech or the feet, but although safest for the child, it is the most dangerous to the mother, as well as most difficult to the operator, and the danger, as might be expected, is in proportion to the difficulty." "And in these attempts," speaking of the several steps in turning, "which will most likely require to be repeated, both the *uterus* and *vagina* would be seriously endangered."

If Ramsbotham expressed these views from experience, his manipulations must have been singularly defective. How a change of presentation from the shoulder to the head, accomplished as it can be, by a force scarcely appreciated by the patient, is to endanger both the uterus and vagina, is to my mind past comprehension.

The opinions of Velpeau are expressed in these words: "Cephalic version may therefore be attempted. 1st. In a well-formed pelvis, where no other accident has happened except a vicious position of the foetus, and the head is found in an inclined position in the vicinity of the strait. 2d. In presentations of the shoulder, back or anterior part of the thorax, *provided the arm is not prolapsed,* and the uterus not too much contracted. Lastly, it seems prudent to try it whenever the feet are further removed from the strait than the head is, and where it is probable the labor would terminate sponta-

ilium. I retained my hand for some time in its position, hoping to be able to insinuate my fingers beyond this point of constriction, and gain the feet, but was compelled to desist and withdraw my hand, and give over the attempt. My exploration discovered the position of the child to be as follows: its right side presented toward the left iliac fossa—inclining somewhat towards the sacrum. The right side of its neck was projected against the pubic arch, near its junction with the right ilium, the head occupying the right iliac fossa anteriorly. In this position it seemed to be firmly and persistently maintained. The impossibility of the expulsion of the child (it being evidently above the medium size,) without decided manual interference, the great risk to the mother from an attempt to turn, so long after the rupture of the membranes, with the firm and consistent constriction of the uterus about the child, induced me at once to propose the advice and co-operation of another Physician. By agreement, Prof. M. B. Wright was sent for, it then being between 9 and 10 o'clock. Expecting some delay, (on account of the numerous engagements of Physicians generally at that time,) I left the patient for the purpose of visiting some cases of cholera; with the understanding that word should be left at my residence, when it would suit Dr. Wright's earliest convenience to meet me in the case. Unexpectedly to me, the attendance of Dr. Wright was secured immediately—a contingency provided for, however, by my request, that should he return with the messenger, and before my return, to accompany my partner, Dr. Morgan, and do in the case as they thought best for the safety of the parties concerned. Being absent about one hour and a half attending to prior professional engagements, I returned by the house of the patient, and was informed that Drs. Wright and Morgan had been there about half an hour before, and that Dr. Wright had interposed in the case, being in too great haste to await the uncertain period of my return. I at once made an examination, and found the arm returned and the vertex presenting. The funis was prolapsed, but without pulsation. Observing the progress of the head during three or four pains, I found it disposed to descend, and only delayed by the resistance of the parietal protuberances. I then ordered *secale cornutum* in twenty-five grain doses every twenty minutes (as she seemed very much exhausted, and the pains inefficient) of which she took two portions. The pains became more energetic, and in about one hour from the time of taking the first dose, the child was expelled—lifeless. I judged its weight to be

about nine or nine and a half pounds. A careful external examination gave no clue to the probable cause of death. It had been dead but a short time prior to delivery. Mrs. S— had a rapid and uninterrupted convalescence.

Dr. Wright's mode of manipulation in the case, was as follows: The patient being on her back, across the bed (in the usual position for turning) he introduced his right hand, passed a couple of loops of the prolapsed funis around the child's arm, and then returned it —converting it into a shoulder presentation. He then grasped the shoulder and thorax, and pushed the body of the child upwards and to the left side, in consequence of which the head was brought near the axis of the pelvis. He then relinquished his hold of the body, and grasped the occiput—bringing it down so as to enable the head to engage.

The succeeding number of the same journal contains a case of shoulder presentation, reported by Dr. Terry. After giving an account of the first labor of his patient, and of the difficulties encountered in consequence of the small size of the pelvis, the doctor proceeds: "On the evening of October 25th, 1850, about 9 o'clock, I was requested to see the above patient, being one year, three months and eight days from the time of her previous delivery, to attend her in her second accouchment. I learned that she had been afflicted with erratic pains for the last twenty-four hours, which at times were quite intense. I found her in bed, lying on her back, the position she felt most disposed to retain, it affording her most rest, and enabling her to endure her pains the better. I made an examination in the position I found her. The os tincæ was dilated about two inches in diameter, readily yielding to pressure. The amniotic fluid was escaping in moderate quantities, showing evidently the rupture of the membranes. I was convinced at once it was not a normal presentation. After waiting three or four hours, the pains became more intense, I made another investigation, and found a shoulder presentation. I now made up my mind that turning must be resorted to—the sooner the better. At this time she had full pulse, flushed face, and spasmodic contraction in the body of the uterus. I resorted to bleeding, when the intensity of the pains ceased. After waiting a short time, I proceeded to the process of turning. I gradually and easily passed my right hand into the uterus, and with little difficulty found the right foot, and brought it down so that the toes were near the vulva. At this point I found

a resistance to any further progress in that way. I then made search for the other foot, but did not find it. During this effort, the right hand of the fœtus came down, and on with drawing my hand, the funis prolapsed. I now attached a strong fillet to the ankle, after which I passed my left hand into the uterus. I attempted to raise the child up from its present position, but failed, the head lying in the right iliac fossa. At this time the pains had ceased, except when roused by external force. The patient, myself, and attendants were much exhausted, from the severe labor and time devoted to effect delivery. After an interval of a few hours, I obtained the able assistance of Professor M. B. Wright. On our arrival the pains had returned, but they were not severe. Upon an examination he found the fœtus presenting with the right hand, leg and funis in the cavity of the pelvis, as before described. He attempted to turn by elevating the shoulder and making traction upon the leg, which he found already down. Failing in this, he endeavored to introduce his hand into the uterus with a view to obtain control of both feet, but the uterus had contracted so thoroughly upon the child as to render it impracticable. The doctor then decided upon a resort to version by the head. The leg, arm, and funis, were successively returned into the cavity of the uterus, and the vertex was brought into the superior strait, with the posterior fontanelle behind the left acetabulum. The patient had been previously put under the influence of chloroform. Uterine contractions having ceased, it was deemed advisable to use the forceps, which were adjusted before the hand of the operator had been withdrawn from the pelvis. It was soon found, however, that the instrument could not overcome another prominent obstacle to delivery, viz., a disproportion between the head of the fœtus and the brim of the pelvis. The perforator was then used, the forceps still retaining their hold. As soon as the cranium was lessend in size sufficient to pass the superior strait, it was brought forward, and delivery was accomplished by means of the forceps."

In the May number of the Western Lancet, 1851, a case is thus given by Dr. J. P. Walker:

"I was called Saturday noon, April 12, 1850, to see Mrs. L——, aged 30, in labor with her third child. The membranes had been ruptured on Friday morning, nearly thirty-six hours previous to the time I was called.

"I found her with severe pains, but on examination could not reach the os uteri. At eight in the evening, I could with difficulty reach the presenting portion. The meconium had been passing freely, and I had been led to expect a breech presentation, but upon close examination I found that the shoulder presented. I sent at once for the assistance of Professor M. B. Wright, who arrived at eleven o'clock Saturday evening."

At this time the arm was suspended from near the center of the superior strait, the fore-arm being partially flexed, and looking towards the left. Dr. Wright proposed *cephalic version*, as an easy and successful mode of treating the case, which was acceded to. The fore-arm, which could be moved easily by the finger, was extended, and the hand escaped through the os externum, with the back of it anteriorly, and the thumb directed to the right thigh. The arm was brought down with a view to a more satisfactory diagnosis, and to indicate the proper manipulations for delivery. The presentation, and the hand to be used in changing it, being determined, the Dr. proceeded to the accomplishment of his object. The patient was placed, as in the ordinary way of turning by the feet. The arm which was now in the vagina, was returned so as to ascertain the relative position of the head. It was on the right side of the pelvis, the occiput in front, the face resting on the posterior surface of the right iliac fossa, and the right cheek against the promontory of the sacrum. The position of the fœtus being thus accurately ascertained, *cephalic version* was commenced.

The body of the fœtus was moved laterally and upwards, by slight force applied to the presenting shoulder, until the breech had ascended to the fundus of the uterus. The face, by this movement, was made the presenting portion. It was readily changed for the vertex, but this change could not be secured without the constant application of the finger to the occiput. This was not deemed advisable, as the expulsive efforts had not yet commenced, and the os tincæ was not more than two-thirds dilated. At half-past ten o'clock A. M., eight hours subsequently, the second stage of labor commenced, and when the next examination by touch was made, the face had again presented, and had partially engaged in the superior strait—the chin being directed anteriorly, and to the left. It was deemed best not to effect any change, either in presentation or position. As the face, however, passed through the superior strait, the chin inclined more and more backwards, until it was placed before

the left sacro-iliac symphisis. Before reaching the inferior strait, the chin had again rotated forwards, without extrinsic aid, and finally it emerged under the arch of the pubis. Labor was then speedily terminated, the second or expulsive stage occupying about two hours and a half. The fœtus was dead, and offensive from partial decomposition. It weighed about nine pounds.

The patient has been doing well since. This case is not only instructive as to the proper treatment of such cases, but also for the remarkable efforts of nature to assist in delivery."

Now after all this, are we not justified in declaring,

1. That at an early period in labor, and especially if called before the uterus has been deprived of its liquid contents, a shoulder may be converted into a vertex presentation more easily than turning by the feet is ordinarily performed.

2. That although the membranes may have been long ruptured, turning by the head can be accomplished with great facility.

3. That delivery by *cephalic version* may be speedily effected, after repeated and ineffectual attempts have been made to turn by the feet.

4. That *cephalic version* should receive a prominent, nay, leading place, as a means of expediting delivery in shoulder presentations.

The second of the questions already proposed, is, what mode of proceeding will prove most favorable for the mother?

In his chapter on podalic version, Churchill observes: "On the other hand its *disadvantages* are not to be overlooked. From the distance the head has to traverse, and the difficulty of seizing the feet, and of turning the child in utero, there must ever be a fearful risk of injury to the mother."

Upon an examination of the tabular views given by Lee, we find that out of seventy-one cases of shoulder presentations, in which turning by the feet was resorted to, "seven women died from rupture, and three from inflammation of the uterus." "Laceration and inflammation of the uterus are, therefore, the consequences chiefly to be dreaded. Four of these cases of rupture occurred in the practice of other accoucheurs, and three in patients under my own care, and where no great difficulty was experienced or force employed in turning."

In *cephalic version* the hand does not enter the cavity of the uterus, and, consequently, neither its walls, nor any portion of them,

are forcibly pushed out. The fœtus is moved comparatively little within the uterus, the head being already near the superior strait; while in *podalic* version, the part to be first delivered, is most remote from the canal through which it must pass. In the former, the injury to the mother cannot result without great awkwardness on the part of the obstetrician, while in the other we have reason to feel surprised at the escape of injury. In turning by the feet the hand must necessarily be moved considerably within the uterus, and often while it is contracting violently. In turning by the head there is but little, if any, direct contact of the hand within the uterus. In the one case, contusion of the uterus by the hand is to be expected —in the other case there is no injury, because there is no contact. Turning by the feet may occasion a severe nervous shock. Not so in changing the shoulder for the head.

How may the life of the child be best preserved? is the third enquiry to be briefly answered.

In describing the disadvantages of turning by the feet in all cases, Churchill says: "The mortality amongst the infants thus brought into the world is very great. As far as our statistics extend, they yield 174, out of 518 delivered, or 1 in 3."

The mortality in shoulder presentations is, doubtless, greater than this. In the first place the position of the fœtus weakens its hold upon life. In the second place the hand is more difficult of introduction into the uterus in shoulder than in head presentations, and whatever force is required is sensibly felt by the fœtus, and upon that part of the body where pressure is made with least impunity.

A timely resort to *cephalic* version gives the fœtus almost as much certainty of life as if the presentation had been originally of the head. Why not? The manœuver amounts to but little more than in rectification of deviated head positions.

We are informed by Churchill that, "Bush gave an account in 1826, of fifteen cases, in which *fourteen* were born living. In 1827, Ritgen collected forty-five successful cases. Riecke has had sixteen cases." In all the cases treated by myself from the beginning, the children were born alive. The liability to compression of the chord and consequent death of the fœtus, is in proportion to the length of the labor, or rather to the descent of the fœtus in the cavity of the pelvis. Hence to be wholly successful, cephalic version should be performed a short time before, or soon after the commencement of the second stage of labor.

Can any mode of treating shoulder presentations be relied on exclusively? The answer must be in the negative. We are disposed to adopt the language of Cazeaux, "that at the present day it would be improper to embrace either opinion exclusively, for some cases are better suited to the cephalic version, while there are others, on the contrary, where the pelvic one is alone practicable; consequently both operations should be retained in practice, leaving the judgment of the acccoucheur to determine the cases, where the one or the other ought to be preferred." And we will conclude this part of the subject by stating a few of the circumstances under which the different modes of turning may be adopted.

Turning by the feet is to be preferred in cases of inefficient uterine action, or exhaustion from long continuance of labor; in hemorrhage, convulsions, or in any case where there may be a demand for a speedy delivery.

Turning by the head should be selected in all cases where difficulty arises from mal-position merely; or in convulsions, hemorrhage, or prolapsus of the funis, if the uterus should be engaged in vigorous expulsive efforts. In rupture of the uterus our great reliance is in artificial delivery; and the question naturally suggested would be, which will guaranty the greatest safety, podalic version, or cephalic version aided by the forceps? And we would be guided in our action by the answer we gave to the question.

Which shoulder presents? The diagnosis of shoulder presentations has been already given, but it is still important to ascertain which shoulder demands our attention, and the relations the fœtus sustains to the pelvis and uterus. Either shoulder may occupy the brim of the pelvis, with the back in one case looking in front of the mother, while in the other case it may be directed towards her spine. The head may be in the right, and again the left iliac fossa, the breech occcupying the opposite fossa, and the feet being high in the uterine cavity. But how are we to ascertain the actual and relative situation of all these parts?

It has been stated that the first vertex presentation (the occiput being behind the left ascetabulum) is more frequent than all the others. If we admit that shoulder presentations are deviations from those of the vertex, it would be fair to *infer* that we were about to adjust the right shoulder with the back in front, and the head on the left of the pelvis. The direction of the axilla would indicate the opposite direction of the head, so also of the elbows. Perhaps the top of the shoulder, the neck, and even the head may be felt.

The direction of the back may be known by the scapula and vertebræ, and by the fore arm lying upon the breast. If the coccyx, anus and iliac crests can be touched, the location of the pelvis is rendered certain.

The hand of the fœtus being in the vagina, can be used with advantage to ascertain which shoulder presents. If the palmar surface be directed upwards towards the symphisis pubis, and the thumb turns to the right side of the pelvis, we at once pronounce the right hand, and, consequently, the right shoulder as presenting. The reverse obtains with the left shoulder. Again, when the back of the hand appears in front, and the thumb is nearest the left thigh, the arm not being twisted, we should prepare to act upon the right shoulder, the back in front and the head in the left iliac fossa.

The back of the hand in front, with the thumb near the right thigh, indicates the presence of the left shoulder, the spine being in front, and the head on the right side of the pelvis.

So little do we consider the presence of the arm in the vagina as an obstacle to turning, we do not hesitate to bring it down, to aid us in our diagnosis if at all doubtful.

In this country, turning is performed, the patient being on her back. In cephalic version, we have always selected this position. The hand can be more readily introduced into the uterus, and the feet reached, however, with the patient on her elbows and knees, than when on the back or sides. There may be cases in which advantage would be gained, by placing the patient in this position, preparatory to cephalic version. This is suggested, however, on the experience of only one case, which may be briefly stated.

We were called to a patient in labor, with shoulder presentation, when we learned from the medical attendants present that the arm had descended into the vagina, full sixty hours previously. From three to five respectable physicians had been lending their aid, each, in turn, making ineffectual efforts to bring down the feet. With the patient on her back, we endeavored to pass our hand above the brim of the pelvis, but failed in this. The arm was swollen to an immense size, and, as it was much in the way, it was amputated at the shoulder, the child of course being dead. Still, the hand could not be extended above the superior strait. The woman, greatly exhausted, was placed and supported on her elbows and knees by assistants. With some difficulty, the uterus was then explored, the feet grasped, and delivery accomplished. When our hand came in

contact with the presenting portion of the fœtus, however, we acted upon it as if to perform the cephalic version, and were satisfied of our ability thus to change the presentation. But, as labor had continued such a long time—as uterine action had, in a great measure, ceased—and as every moment of delay threatened an increase of great danger to the woman, a preference was given to podalic version.

The hand to be used.—The relations of the fœtus to the pelvis having been ascertained, and the patient placed in a proper position for turning, the next question is, which hand shall be introduced into the vagina? We answer, the hand, the palm of which is directed naturally towards the breech of the fœtus. It will be seen at once, that if the fœtus is to be moved in the direction of the breech, and in correspondence with the right side of the mother, and the left side of the operator, the right hand could be used with most success. In cases in which the head occupies the right iliac fossa, a choice could be given to the left hand.

The prolapsed arm.—It is generally conceded that, in turning by the feet, it is not necessary, nor would it be advantageous, to return above the brim of the pelvis, the arm, which may have fallen, or been brought into the vagina. In turning by the head, on the contrary, its reposition admits of no doubt; it is imperatively demanded. It is not demanded in consequence of any difficulty in moving the shoulder by its presence, but in the adjustment of the head at the superior strait, and its subsequent descent through the pelvis. By bending the fore arm of the fœtus until the hand is directed to the upper portion of the vagina, and then pushing up the arm, the entire member will soon ascend above the brim of the pelvis, and be no longer an obstacle to complete version.

The manner of performing cephalic version.—The attention of the profession is not now directed to *cephalic version* as a new subject. It was recommended by Hippocrates, and from his days to those of Pare, was attempted in all cases in which the head did not originally present. Presentations of the breech and feet, were not associated with natural labors until a comparatively recent period.

The practice and influence of Pare led to the adoption of *podalic* version, and it has continued the reigning fashion up to the present time. Instead of changing the feet for the head, in all cases where the former presented, as recommended by Hippocrates, it is now deemed proper, following the example of Pare, to substitute the feet for the head, in many cases of difficult labor.

The spirit of progress, however, has not been idle, although it has been slow in making proselytes. Opposing doctrines have been carefully scrutinized, to a certain extent harmonized, and adapted to individual cases. Flamand, professor at Strasburg, recalled the attention of the profession to the utility of cephalic version, and exerted his influence, by argument and illustration, to have it reinstated. Some of the German and French writers have been induced to assign cephalic version a place among obstetric operations; but they consider it applicable to such a small number of cases, that they have bestowed upon it little attention, and have attached to it but a small share of practical importance.

Although American minds are ever on the alert, and ready to test the value of suggestions from a practical source, they have not directed special attention to the subject before us. Indeed, the investigation of it has been prevented, by the expressed opposition of our writers and teachers on the one hand, and their silence on the other. And here I may be allowed to advance an opinion, which was openly entertained when a teacher myself, that the mass of the profession think and act too little for themselves. They too often embrace the doctrine of the teacher as true, to the rejection of their own experience. We would say to the lecturer, independence rather than place—be a martyr for truth, rather than be false to your profession to appease local jealousy. And we would urge, that while the practitioner awards honor where it is due, he should be true to himself, by thinking and acting for himself.

A few paragraphs from Cazeaux will express the opinions generally entertained upon cephalic version by European writers:

"Flamand was also in favor of the performance of cephalic version, even after the rupture of the membranes and the discharge of the amniotic liquid. He has even gone so far as to point out the particular manœuver for each one of the distinct presentations admitted by him, for the child's anterior, posterior, and lateral planes; but we deem it useless to enter into those long details, more especially since they may all be comprised in this: to grasp the presenting part, push it up above the strait, and then carry it as far as possible towards the side opposite to where the head is found, and afterwards get hold of the latter and bring it down, if the efforts made by the other hand through the abdominal walls, have not proved sufficient to make it descend into the excavation."

"Flamand himself acknowledges that this operation seldom succeeds, excepting when some region of the neck or upper part of

the thorax presents at the strait. As for ourselves, we believe it would be difficult, even under such circumstances; however, it is barely possible, especially if there is still some water in the uterus, and the contractions are not very energetic."

"When a trunk presentation is complicated by the descent of an arm, the cephalic version, recommended by Ruffius, Rhodion, and others, should, in my estimation, be wholly rejected."

If we were to be restricted in our manœuvers by the advice given in some late obstetrical works, we should certainly fail in our object, and sooner or later we should be convinced that lessons given in the absence of experience are liable to errors, even in the outlines. Churchill tells us that, "if our object be to change the presentation—for example, to substitute the head for a shoulder, we must gently push up the shoulder, and then seizing the head, bring it down to the brim, and place it in the most favorable relation to the pelvis."

A professor representing the difficulties, nay, impossibilities, of performing cephalic version in shoulder presentations, places the leather baby in the manikin, raises the shoulder in a line corresponding with the axis of the pelvis, and with an air of triumph asks, "now, if I withdraw my pressure, or if the uterus should contract, will not the shoulder return to its original position?"

In reply to the above, let us merely observe, that the expressions "*raising the shoulder,*" and "*grasping the head,*" convey a very imperfect idea of the manœuver constituting cephalic version. And, to shorten discussion, we will present our own mode of proceeding.

Suppose the patient to have been placed upon her back, across the bed, and with her hips near its edge—the presentation to be the right shoulder, with the head in the left iliac fossa—the right hand to have been introduced into the vagina, and the arm, if prolapsed, having been placed, as near as may be, in its original position across the breast. We now apply our fingers on the top of the shoulder, and our thumb in the opposite axilla, or on such part as will give us command of the chest, and enable us to apply a degree of lateral force. Our left hand is also applied to the abdomen of the patient, over the breech of the fœtus. Lateral pressure is made upon the shoulders, in such a way as to give the body of the fœtus a curvilinear movement. At the same time, the left hand, applied as above, makes pressure so as to dislodge the breech, as it were, and move it towards the centre of the uterine cavity. The body is thus made

to assume its original bent position, the points of contact with the uterus are loosened, and perhaps diminished, and the force of adhesion is in a good degree overcome. Without any direct action upon the head, it gradually approaches the superior strait, falls into the opening, and will, in all probability, adjust itself, as a favorable vertex presentation. If not, the head may be acted upon as in deviated positions of the vertex, or it may be grasped, brought into the strait, and placed in correspondence with one of the oblique diameters.

It will be observed, that we do not act upon the shoulders by raising them. Perhaps a slight elevation would facilitate the movement already described—or it might be better to depress them—and, again by lateral pressure, without either elevation or depression, our object might be accomplished. *Pushing up the shoulders*, therefore, does not constitute a prominent part of turning, if by pushing up is meant the mere raising of the shoulders above the brim of the pelvis.

As the body of the fœtus makes its curved movement under the hand of the operator, it advances upward, as well as laterally, by a combined, rather than a single action, which would give it only one direction.

The back of the hand, with which we have been acting upon the shoulder, is toward the head of the fœtus—consequently, its hold upon the head would be apparently slight—yet, after the shoulders have reached the iliac fossa, the vertex may fall upon the palm of the hand in occupying the strait, and its adjustment become easy. If, however, there should seem to be a necessity for grasping the occiput, there could be no reasonable objection to a speedy change of hands.

The entire process of cephalic version is to be adopted in the absence of uterine contraction; or rather, during intervals of expulsive force. And, as it is now a vertex presentation, we must be governed, as to time and manner of delivery, by those general rules applicable to such cases.

In all our cases, except the one which terminated as a face presentation, the occiput assumed a position corresponding with the first or second presentations of the vertex. In this case the occiput was before one of the sacro-iliac symphises, and to this fact we have attributed the tendency of the occiput to slide above the brim of the pelvis, and the difficulty in keeping it in place. If there had

been the usual degree of uterine contraction, however, the head would, in all probability, have become fixed, and the presentation would have continued as one of the vertex, instead of changing for the face.

It will be seen that we lay no claim to the introduction of cephalic version as a mode of treating wrong presentations, and expediting delivery. A very brief examination of the subject, however, may induce some to award to us originality in respect to the means by which a successful change of presentation may be accomplished.

That cephalic version, by external manipulation—by acting upon the fœtus through the parietes of the abdomen and uterus—should have few advocates is not surprising. To be successful, it confessedly requires a combination of favorable circumstances not often presented. The tissues both of the abdomen and uterus, must be thin and yielding—the liquor amnii must have been retained, and in considerable quantity—and the fœtus must be proportionably small.

In all the obstetrical works we have examined, in which cephalic version is recommended by internal manœuvre, it is directed to *raise* the shoulder as the first necessary impression upon the fœtus. Viewed anotomically or mechanically, men have not been persuaded into the belief, that raising the shoulder can facilitate the permanent descent of the head into the superior strait. They claim, what is apparent to the eye in viewing a proper engraving, and as it can be demonstrated with the manikin, that the elevation of the shoulder at the brim of the pelvis, tends to increase the long diameter of the fœtus, and the transverse diameter of the uterus, and without any favorable adjustment of the head after pressure upon the shoulder has been withdrawn.

Suppose we follow out the directions given by some, and after the elevation of the shoulder, attempt to force the body of the fœtus in a lateral direction, will not the breech infringe against the walls of the uterus transversely? To enable the head to engage in the superior strait, the body must be entirely removed from it, and this can only be done by raising the breech towards the fundus of the uterus. Raising the shoulder, therefore, is very naturally considered a means to prevent cephalic version. And we are not surprised that podalic version is almost universally adopted in the treatment of shoulder presentations.

If our mode of performing cephalic version is sufficiently clear, in the description already given, it will readily be distinguished from others. We claim for it great importance, on the ground that it is easily executed—that the mother and fœtus receive no injury—that there is little or no danger of subsequent displacement after the vertex has been fully adjusted—that, although it is most successful in recent cases, delivery may be accomplished after the membranes have been long ruptured—that it may be executed, after ineffectual efforts to bring down the feet.

Possibly our time might have been more profitably employed than in writing these pages. If, however, we shall have directed the minds of our brethren into a new train of observations, and aided in giving a true value to cephalic version—and, especially, if life shall thereby be preserved—we shall consider that an ample reward has been bestowed on our labor.

ART. II.—*Report of the Committee of the State Medical Society on Medical Ethics.* By JOHN DAWSON, M. D., Chairman.

THE appointment of Standing Committees is one of the duties annually performed by our Society. But the necessity or propriety of each one of the Committees making reports, of course, depends upon a number of circumstances. That some should do so is absolutely indispensable; the members of others may find it impossible to collect the proper material; and others, where material is in abundance, may, perhaps, think that it may not conduce to the interests of the Profession to give it publicity.

To the class last mentioned, we presume belongs the Committee on *Medical Ethics.* This Committee, as its name imports, has imposed upon it the obligation of making known to the Society the moral standing of the Profession throughout the State. A work implying a knowledge so comprehensive and delicate, is very difficult to perform, and, of course, what is said, should be received with due allowance.

Morality in the Medical Profession is not a matter of spontaneous growth, any more than it is in any other department of Society. The impulses of the human heart, when unrestrained, do not always give rise to actions that are unexceptionable, and calculated to promote social life. Impressed with the truth of such views, our

fathers in the Medical Profession commenced very early to criticise the conduct of each other, and lay down certain rules to which all exercising the duties of a Physician should be subjected. From time to time these rules have suffered the changes, and received the additions which, in the estimation of the good, and those having the most enlarged experience they required. At the hands of the American Medical Association they have lately been again revised, and may now be regarded as being as perfect as any that can be prepared.

It constitutes no part of our present scope to enter minutely into a consideration of the relation of the profession of Ohio to these rules as we find them fixed up in our Code of Ethics. A few, and only a very few of them most essential to the integrity and success of our calling will be noticed. From among these we select the following, coming under the title of "*Duties for the support of Professional character.*"

"Every individual on entering the Profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honor, to exalt its standing, and to extend the bounds of its usefulness. He should, therefore, observe strictly such laws as are instituted for the government of its members—should avoid all contumelious and sarcastic remarks relative to the Faculty as a body, and while by unwearied diligence he resorts to every honorable means of enriching the science, he should entertain a due respect for his seniors, who have by their labors brought it to the elevated condition in which he finds it."

A doctrine clearly set forth in this section, is, that the Profession of Medicine has a *character* which is the property, not of a single member, or of the members of any particular region, but of the Faculty of the whole country. This character is the result of the labors of the upright in heart and the self-sacrificing for centuries; and, as a consequence, it is no wonder that there are many to be found who venerate it, and exert their best abilities to maintain its dignity and honor.

The introduction of an individual into the Medical Profession consists in nothing more nor less than the clothing of him with the character of the Profession, and in imparting to him the right to exercise every thing pertaining to it, for the good of Society, and of himself. The possession of such a treasure, together with the rights

pertaining to it, must necessarily imply on the part of the individual thus invested, certain obligations, for without the existence of these, the relation would be imperfect. These obligations, among other things, require of him that he shall exert himself in every reasonable manner, and on all proper occasions, to maintain the portion of professional reputation entrusted to his care; and that he shall also add to the common stock. For it has been in this way, and in this way alone, that our common character has been built up—has been formed. Like the mountains in the bottom of the ocean, it is the result of the joint labors of great men, faithfully and industriously carried on for a long series of years.

The question might here be raised as to the manner in which the Profession in our flourishing State is demeaning itself with reference to the moral standard we have adopted. Is it laboring with zeal and a singleness of purpose to promote the most desirable results, the elevation of our calling to the standard of the greatest possible degree of perfection? Are we all ready to make sacrifices both public and private for the general good?

Questions of this kind are not so easily disposed of as might at first view seem to appear. In looking over our State, and taking an imperfect view of our Physicians, and the manner in which they are demeaning themselves to the Profession and to the people, we see much to excite admiration and gratitude. Laboring for less pecuniary reward and at greater sacrifices of leisure, and all the conveniences and comforts of life, than what in these times pertains to any other kind of business, they seem, nevertheless, as a general rule, to be conducting themselves very creditably, so far as an honest and faithful observance of the essential rules of Ethics are concerned, while at the same time they are performing their duties to the people, frequently under circumstances of danger, with alacrity.

While such is true with regard to the great mass of the quiet and working part of the Profession, it is a matter of mortification that the same cannot be universally affirmed.

In looking around at the causes which embarrass the onward progress of the profession, our mind has been attracted to one, that in many sections of the State has had quite a prominent existence. We allude to the practice, in these times of "Liberty of Speech," of "speaking evil of each other." At present, perhaps, more than at any former period, there is a great rivalry going on between

practicing Physicians, as well as between those engaged in teaching. All the energies of the race appear to be called out for the purpose of making an effort, and it is not difficult to recognize the general prevalence of the sentiment, "*success now or never.*" Under such circumstances, and in the general rush towards the accomplishment of purposes, much is done that should be left undone, and many things left undone that should be done. If we were to attempt a specification of what seems to be within the province of improprieties, we could not omit to notice under this head a practice that has got currency of medical men of making *ante mortem* dissections of each other. The object of the process, to keep up the figure, does not seem to be for the purpose of finding out what organs are well developed, and capable of moving off physiologically, but of finding out the weak ones.

The latter are selected as being very proper to lecture on in the social circle ; and they scarcely ever fail to secure the most profound attention. Time was in our profession when very few engaged in these exercises, and it was supposed that they were not very well calculated to promote dignity or result in profit. These days have passed away, and many now resort to them as a means of enjoyment, of securing notoriety, and obtaining position. *Tempora mutantur, et nos mutamur in illis.*

What has been sketched is not a mere fiction. Our conversation about each other, when surrounded by the circumstances of rivalry in practice or in teaching, too often wants candor, liberality and dignity. Old men are denied the veneration and respect due to their years and services ; younger ones, who happen to be prominent, are criticised, persecuted and occasionally slandered.

Involuntarily springing up in our minds just here, is the rumor of a serious outrage upon etiquette, which occurred during the past year, and in which some of our members were concerned. It constitutes no part of our desire to revive the recollections of the profession on a matter, the occurrence of which no doubt all engaged in, heartily regret. Nor is it any part of our recognized duty to attempt an investigation, as to which of the parties were most in fault. We have no right to admit the existence of any circumstances that should serve to extenuate conduct so objectionable, and so much at war with the dignity of our science. Our views are, that it was all wrong, uncalled for, and might have been avoided.

We regard it unnecessary to allude to the influence of such conduct upon the profession in the public mind, the place where we most need position at the present time.

As far as it becomes known, it will be every thing else than salutary. Upon the reputation of the individuals concerned in it, whether defeated or victorious, there will most likely be an illustration of that orthodox maxim, which says, that "The way of the transgressor is hard;" and it might at first view appear proper that our Society should be satisfied with that kind of redress for the injuries it has sustained. Had an offense of equal character been committed by individuals residing in some obscure portion of the State, such might be the most available disposition of the case. But, unfortunately, it has happened at a point which many of us would have been proud to regard as the Athens of Medical Literature for the whole West; and some of the individuals concerned in it have aspired to a position, and been recognized as teachers, not only of the various sciences which go to make up the Medical, but also of the *Ethics of the Profession!*

Whether in the future we are to continue to recognize them as teachers in the latter capacity, is a question not by any means free from difficulty. Perhaps they can promise us in the way of satisfaction something like what the eccentric Abernethy on a certain occasion offered to his students. This individual, as all know, was justly celebrated for his knowledge of Hygiene, and all the means calculated to promote health and long life—still he observed none of them himself, but, on the contrary, was in the habit of indulging very frequently in excesses and fits of intoxication. After concluding one of his inimitable lectures to his pupils, on the subject of temperance, in eating and drinking, etc., he remarked in the conclusion, that he wished no one to follow his own example—that he himself was a little like a certain parson and the guide board, both pointed the way, but neither followed the course.

A model Physician, with respect to troubles similar to those we have noticed, and as a remedy for them, has proposed the following prescription: "Love your enemies; bless them that curse you; do good to them that hate you; and pray for them that despitefully use and persecute you." This prescription has always had a high reputation for efficacy, and if not needed just now as a *remedy*, it might not be bad policy to take it as a *prophylactic*.

During the last year our attention has been called by some very respectable Physicians to that part of the intercourse between professional men called *consultation.* There appears to be, as far as we can learn, a growing indisposition among rival practitioners to meet each other at the bed-side, for the purpose of deliberating upon what should be done for the sick. Not long since a position got currency, and was published in some of the leading journals of the day, the substance of which was, that when one Physician called another one in to consult with him, it was equivalent to giving the latter a mortgage upon the patient. Although it is to be regretted very much that a position so humiliating should be thrown broad-cast before the Profession, notwithstanding it was in connection with some humorous and useful suggestions on other subjects, still the sentiment may be nothing less than a kind of spontaneous expression of a feeling that is more general than what might *a priori* have been expected. Without doubt there is in many regions a great falling off in the way of consultations. The testimony on this point is abundant.

In looking about for the causes of this state of things, we can see no propriety in attributing it to fruitless results to patient or Physician. This would reverse the plainest axioms of professional experience, and would be an insult to the judgment of the good and great wherever Medicine has been successfully cultivated. To the novice, consultations are indispensable, and to even the most experienced, they are of not less value than that of occasionally saving a valuable life.

Taking this for granted, other things must be invoked for an explanation. Is our intercourse at the bedside always characterized by pure motives—a proper care for the sick, and a desire to promote in every possible way the reputation of the attending Physician? We wish these questions could be answered in the affirmative. Once in a while when a Physician is called in consultation, he takes it for granted that his services have been required because of his superior skill. This may or it may not be the case. In either event, his conduct should be the same. There should be nothing like an assuming dictatorial course, or an attempt to criticise previous treatment.

Every word said by the consulting Physician, every motion he makes, and every expression of his countenance is observed and watched with the greatest possible precision; and should there be

any thing in these that conflicts with what has been said or done by the attending Physician, or that even has appearances in that way, it results in destroying or impairing confidence in the latter, and his further attentions to the case, become disagreeable to himself, and unsatisfactory to the patient.

Another phase of the matter a little more humiliating, is occasionally observed. There are many Physicians whose general intentions are to do right, to deal honorably, and still it is hard work for them to let the opportunity pass unembraced, that will exalt them even at their worthy neighbor's expense. They seem to be unable to resist selfish impulses, and as a consequence, injury sooner or later to the Physician in attendance and to themselves is the result.

A course of procedure somewhat different in character, but not less objectionable in its consequences, not unfrequently takes place *in changing the prescriptions of the attending Physician, merely for the sake of change.* It matters not how well the treatment may have been adapted to the case, it is usual for some to think that their services will not be appreciated, *unless some change is made in the Medicine.*

Here the real object of consultations, that of giving the patient the benefit of science, and the inspiring him with confidence in his Physician, is sacrificed upon the altar of fallacious reasoning and selfishness, and perhaps a suspicion awakened in his mind, that the previous treatment has been wrong.

Changes in the treatment should as much as possible be avoided at the time a consultation takes place; and when even proper or necessary, they should be postponed, for the sake of the attending Physician, as long as would be compatible with the safety of the patient—certainly never made for the sake of a change or to gratify a whim of the consulting Physician.

According to the nature of the case it results that young practitioners, and Physicians who are just commencing business in a new location, most frequently require consultations. The consulting Physician is under such circumstances selected from among the old and well-tried. This is perhaps true in a large majority of cases. Now, this natural circumstance often begets on the part of the consulting Physician a feeling of professional importance, sometimes austerity, and occasionally dogmatism. He is apt to imagine that his services are required, as remarked in a previous connection, be-

cause of the possession of superior attainments. This may be the *reason* why he is called, and it may not be true. Many of our young men at the present time are so well posted up, that their practice would compare favorably with that of their seniors, in all of the cases requiring for their successful treatment, the possession of accurate knowledge. Indeed, it is by no means impossible, that an old, experienced Physician, may be frequently benefited by the suggestions of one of our industrious and energetic young men Why not, therefore, in order to promote the frequency of consultations, change the order a little, and have the seniors to request, where consultations are demanded, not the services of another senior, as is usually the case, but the services of one or more of the juniors. Old blood and young mixed together, sometimes secures results, for the accomplishment of which, it might safely be presumed, neither separately would be adequate. No harm can possibly result from a move of this character. It will exhibit a commendable liberality on the part of the older members, and will result in encouragement to the young, to many of whom indeed, who are just commencing and worthy, it will come as a "God send."

Impressed with the belief, that the value of consultations most frequently consists in inspiring confidence in the Physician having charge of the case, and in assisting him like one mariner would another that had been tossed about by contrary winds, to keep his latitude and longitude right, until safely anchored in the port of safety, we cannot avoid suggesting the propriety of a review and revision of the whole subject. Consultations cannot be dispensed with without incalculable detriment to the sick, saying nothing about their value, when honorably conducted, to the profession. But we repeat it, that it is the testimony of Physicians all over the State, that they are diminishing in frequency, that many of the older Physicians are avoiding them as useless, while the younger ones are complaining that they seldom ever get through with them without being injured. To us, the existence of such facts, are everything else than agreeable, and of course our only object in alluding to them is that our Society may look them in the face and make an effort at their correction.

A subject following within the range of Ethics, and, perhaps, of sufficient importance to merit a passing notice, is the compensation that the Physicians of our State are receiving for their services. With but few exceptions it appears to be insufficient. To some ex-

tent this has always been the case, but at the present it is eminently so. Every department of labor or service has demanded from the community increased rates of remuneration, while the attentions of the Physician, his deprivations and sacrifices have underwent so far as increase of compensation is concerned, no change. Indeed, we are not sure but that the reverse is true. Physician's bills, from all that we can learn, are now paid off with less money and more reluctance than they were a quarter of a century since. Many of our best educated young Physicians find out on entering the profession, that the compensation for their services, if even they succeed to a reasonable amount of business, is less than what can be obtained in many of the ordinary pursuits of life, and, as a consequence, they abandon the profession. Many too, who have labored in the ranks of the profession for years, find out at last that they are failing to secure the means necessary to sustain the infirmities of life, and in disgust turn their attention to other pursuits. What now is the remedy for this state of things? Heretofore, reliance has been placed upon the getting up of "Fee Bills." Badly these have worked in most places where they have been tried. Too frequently the people have looked upon them as combinations to extort exorbitant charges, and it is humiliating to acknowledge it, but it is nevertheless a fact, that they have too often had their suspicions strengthed by the testimony of some worthless member of the profession, one of which can be found almost in every neighborhood, and who, by uniting in the clamor, have found it the most available way of obtaining business. In view of this state of things and the propriety of doing something, no measure seems to us more likely to be attended with good results than a general move upon the part of the older Physicians, those well established in the confidence of the community. Let them by concert of action take the proper ground in relation to the matter and maintain it, and the work will be done. What they do is generally regarded as right, should it even interfere with the usages of the purse. Besides, they owe it to themselves and to the profession, to lead off in a measure so necessary at the present time, and one that unless remedied, our profession will frequently have to be united with some other kind of business in order to furnish the means of a reasonable support.

Before closing what we have to say, it might not be improper to allude to the general standing of the profession at present in the public mind. Like many things, to which we have alluded, this is

not what most of us desire. A constant fire kept up with great industry by all those, who muster in the ranks of the irregulars, has had the effect of destroying the confidence of large portions of different communities in the superiority of Scientific Medicine. It were well if this injurious influence was exerted only by the unwary and ignorant. Then we could look forward with some hope to the changes which the schoolmaster is making upon the race, as the era of deliverance from the trouble and annoyance. But how frequent, and how common it is to see those communities, that we regarded as being the most intelligent, taking the foremost rank in the patronage of the most transparent humbugs of the day. And what is worse, many of our distinguished men—those entrusted with the care of Church and State, and enjoying a large portion of public confidence, not only seem an easy prey to the mountbank, but, when occasion requires it, are ready to aid by their personal or official influence in almost anything, that detracts from the character and claims of medicine, scientifically studied and scientifically practiced.

Besides the operation of causes, *external*, we have those of an *internal* character, the influences of which are decidedly more fatal. To some of these we have already alluded in another connection, and only notice them here to increase attention to them, as our worst enemy. It is an old maxim that teaches the doctrine, that if we would have others respect us, we must respect ourselves. We have seen enough to convince us all, that, although our existence as a faculty is indispensible to the welfare of humanity, still we cannot rely on utility alone, as the means of securing confidence, and of giving us popularity. To amenity and straight-forward upright conduct, to a disposition to treat each other under all the circumstances of rivalry, as gentlemen, as brethren; to the habit in all our connections of avoiding contumelious or sarcastic remarks in relation to each other, to union among ourselves, and to our industry in cultivating every department of nature and art, available in the management of physical infirmities, we may look with confidence as being the only means of placing us in a position to command the respect and influence to which we are so justly entitled.

PART SECOND.

AMERICAN AND FOREIGN INTELLIGENCE.

ART. 1.—*Arsenic-Eaters.*

We translate the following from the Journal de Chimie Médicale, de Pharmacie, de Toxicologie, &c., Paris, July, 1854, for the benefit of those who may feel an interest in the extraordinary accounts which have been disseminated, concerning the people called arsenic-eaters. We doubt not the majority of our readers will agree with M. Chevallier, the intelligent editor of the Journal, that such improbable statements can only be believed when supported by better authority than the simple assertion of M. de Tschudi.

It has been made a subject of complaint that we have not spoken in our Journal of the *toxicophagi*, or *arsenic-eaters*. The facts reported have appeared to us so improbable, that we have put no faith in them; and our incredulity still persists. But since some of our readers ask for details, we think we cannot do better than give them an article published in the Presse Médicale Belge, of the 28th. We do not, however, advise them to experiment on this subject, for it is probable that something is wanting in France to enable us to become *toxicophagi*.

The Journal de la Société des Sciences Médicales et Naturalles de Bruxelles has just published an article of J. J. de Tschudi, which is really astonishing. Hitherto we have considered arsenic as one of the most active poisons, which could in no case agree with the digestive organs of man. Behold an error, a great error! Men can eat arsenic; men *do* eat arsenic! Heaven knows where the appetite will stop, if it is to be guided by the reports which this singular discovery has caused, and by the results which are attributed to this remarkable diet, for, it is said, young women regale themselves with it, out of coquetry, in order to render their complexions fresher and more rosy. It is enough to cast into the shade all the known specifics; the *eau de jouvence* can hardly sustain itself, its ancient reputation is so strongly threatened by arsenic.

"But this is all an idle story," we shall be told. By no manner of means; read the following article, and say what you think of it.

On the Toxicophagi. By Dr. J. J. de Tschudi.

"Some may have lately read in a report of a trial which took place at Cilli, before a jury, in a very remarkable case of poisoning, in which the defendant, Anne Alexander, was acquitted, that three witnesses for the prosecution were interrogated, as to the point whether a certain Lieutenant Matthias Wurzel were a *toxicophagus* or not. This fact was not proved, and the only evidence, though not important, which might give probability to this supposition, was that of the first-lieutenant, M. J***, who testified that in the year 1828, he had found in Wurzel's desk a small box containing fragments of the size of a grain of maize, which could have been nothing else than white arsenic. The testimony of the two other witnesses was founded upon hearsay only.

"The toxicophagi being phenomona more or less unknown to the medical public, I have thought it my duty to publish some information and observations on this subject.

"In some of the countries of Lower Austria and Styria, especially in the mountains which separate them from Hungary, is found among the peasants the remarkable custom of eating arsenic. They purchase it under the name of hedri, (*hedri, hedrich, huttegruuch,*) of wandering herbalists and pedlars, who obtain it, in their turn, from the workmen in the Hungarian glass-houses, from cattle doctors, charlatans, &c.

"The toxicophagi have two ends in view. In the first place, they desire to obtain by this dangerous practice an appearance of freshness and health, besides a certain amount of *embonpoint.* Young peasants, of both sexes, are consequently those who frequently have recourse to this expedient, through coquetry and the desire to please; and it is, in fact, surprising with what success they attain their end, for the young toxicophagi are especially distinguished for the freshness of their complexions, and by an appearance of flourishing health.

"I will cite but a single example among many cases which have come to my knowledge. A girl who watched cows, healthy, but thin and pale, lived on a farm in the parish of H***. Having a lover whom she wished to attract more strongly by her charms, she resorted to this well-known method, and took arsenic several times a week. The desired result was not long in appearing, and after a

few months she became plump, chubby, in a word, all that the swain could desire. In order to excel in these respects, she imprudently increased the dose, and fell a victim to her coquetry. She died poisoned, and her end was a painful one.

"The number of deaths from abuse of arsenic is not trifling, especially among young people. Every clergyman of those countries has known several victims, and the results of my inquiries among the pastors have been very curious. Either from fear of the law, which forbids the illegal possession of arsenic, or from an inward voice which reproaches them for their fault, the toxicophagi dissemble, as much as possible, the use of this dangerous remedy. It is commonly the confessional or death-bed only, which removes the veil from the secret.

"The second advantage which the toxicophagi wish to gain, is to become more 'light'—that is to say, to facilitate respiration in mounting steep ascents. On every long excursion in the mountains, they take a small piece of arsenic, which they allow to dissolve slowly in the mouth. The effect of this is surprising; they ascend heights which they could only mount with the greatest difficulty without this practice. I may add here, that taking advantage of this hint, I have administered Fowler's solution with considerable success in cases of asthma.

"The quantity of arsenic with which the toxicophagi commences, equals, according to the avowal of some of them, a little piece of the size of a lentil, which would make rather less than half a grain.* They stop at this dose, which they take several times a week, in the morning, fasting for a considerable time, 'in order to get used to it;' then they increase the dose gradually, with precaution, according as the ordinary quantity loses its effect. A peasant, R***, of the commune Ag**, 60 years old, and enjoying very good health, now takes at each dose a piece of about four grains. It is more than forty years since he acquired this habit, which he inherited from his father, and which he will bequeath to his sons.

"It is well to note, that no trace of arsenical cachexy is visible in this individual, nor in many other toxicophagi; that the symptoms of arsenical poisoning never appear in those who know how to apportion the dose, sometimes very considerable, of the poison, to their constitution and tolerance. We must also remark, that the

*This calculation is not exact.

suspension of the use of arsenic, either from inability to obtain the article, or because the individuals abstain from the arsenious acid from some other reason, is always followed by morbid phenomena, which resemble those produced by arsenical intoxication to a feeble degree. Thus, we observe much general uneasiness, with great indifference for everything around the patient, anxiety, disturbance of digestion, loss of appetite, a sensation of fullness at the stomach, vomiting of a glairy fluid in the morning, with ptyalism, pyrosis, spasmodic constriction of the pharynx, spasmodic pain, constipation, and especially embarassment of the respiration. For all these phenomena, there is but one effectual remedy—the immediate return to the use of arsenic. According to the most exact information obtained from the inhabitants of these districts, arsenic eating never degenerates into a passion—like, for example, opium eating in the East, the use of the betel in India and Polynesia, or the loca in Peru—it becomes rather a necessity to those who addict themselves to it.

"The employment of arsenic by these people finds its parallel in that of corrosive sublimate in other countries. I will merely allude to the well-known case, confirmed by the English ambassador in Turkey, of an opium-eater at Brussa, who swallowed daily along with his opium, the enormous quantity of forty grains of corrosive sublimate. In the mountains of Peru I have frequently met with similar individuals; and in Bolivia, the employment of this drug exists to such an extent, that it is openly sold to the Indians in the provision market!

"It is needless to call attention to the extensive use of arsenic even at Vienna, especially among the grooms and coachmen of the mansions of the great. They mix a good pinch of the powder with oats; or, attaching to the bridle a fragment of the size of a pea, wrapped in linen, when the horse is harnessed, the saliva dissolves the poison. The glossy, round, and elegant appearance of valuable horses, and especially the white foam from the mouth, are generally due to arsenic, which, as is well known, increases saliva. The teamsters in mountainous countries frequently add a dose of arsenic to the fodder which they give to their horses before a laborious ascent. The jockeys often make use of small shot for broken-winded horses, which they are carrying to market. It appears that the invariable effect of this manœuver, an effect which lasts several days, is owing solely to the arsenic which the shot contain. In the man-

ufacture of these projectiles, one per cent. of white and yellow arsenic is added to the lead, to render the mass more fluid and apt to assume a spherical form. The quantity of arsenic found in the possession of these grooms is often very considerable, and their carelessness most culpable.

"R***, a brewer at A***, placed in the hands of M. B. Sch***, a piece of arsenic weighing three-quarters of a pound, which he found in the trunk of his servant. Last winter a peasant poisoned himself in my neighbornood, with a piece of arsenic of the size of a pear, which he pulverized and swallowed in water. He expired half an hour afterwards.

"This practice may continue for years without accident; but as soon as the horse passes into the hands of a master who does not employ arsenic, he becomes thin and wan, loses his spirits, and in spite of the most abundant nourishment, the animal never recovers his former external appearance.

"These remarks on the toxicophagi, hastily sketched, may serve to show how useful it is to physicians and legal gentlemen to be aware of this wide-spread abuse in certain districts of the Austrian monarchy. The judicial proceedings alluded to at the commencement of this article, did not render it evident whether M. Wurzel were an arsenic-eater or not, but it is allowable to believe that he was. If the autopsy and chemical investigation had not been made with unpardonable negligence—if the defendant (gifted with rare intelligence) had been embarassed by the reiterated interrogatories to which she was subjected, and had been surprised into contradictory or inaccurate statements, it is probable that the verdict of the jury would have been less favorable to Anne Alexander, in spite of her innocence."

On the Toxicophagi. By Dr. Tschudi. (*Wiener Medizinische Wochenschrift*, No. 1, 1853.)

"The immense interest excited by my communications on the toxicophagi, in the 28th number of the first year of this Journal, induced me to devote, during the period of a year, my whole attention to this fact, so interesting in a medical and legal point of view, and which, if not denied, has been at least doubted by several English journals. I have been able, during this time, to confirm, perfectly, my former statements, and to increase them by identical examples. One of the most inveterate arsenic-eaters, who

at first, as usual, denied most obstinately making use, personally, of arsenic, in the end made the fullest avowal, and told me that he had taken his dose of arsenic with great regularity from his 27th year to the age of 63, several times (eight to ten) per month, at the time of new moon. He began with a small fragment of the size of a flax-seed, and during many years did not go beyond a dose which he indicated by a bit of charcoal. I took the trouble to weigh a piece of Hungarian arsenic of the same dimension; the weight was between three and four grains. When I asked him why he had never increased the quantity, he replied that he had not dared to do so, having been made ill by it some years previously. At that time, he took, while intoxicated, a larger quantity, which occasioned violent cholic, a burning pain in the throat, griping at the stomach, &c. The reason why he has abstained from arsenic for nearly two years, is the death of one of his friends, also an arsenic-eater, who died of dropsy, and who had suffered much. He thought this was owing to the arsenic, and dreading a similar fate, had not taken the 'hidri' since, although this abstinence caused him much inconvenience.

"Since this man has ceased taking arsenic, he is frequently subject to violent gastrodynia, During all the time that he was addicted to it, he was ill only once, of a pneumonia. A circumstance worthy of remark was the immunity which this individual enjoyed from the itch, at a time when every individual in the house, with whom he lived in uninterrupted contact, was attacked by it. According to an approximate calculation, this man took, during thirty-five years, from twenty to twenty-two ounces of arsenic; and yet this frightful quantity of one of the most violent of the metallic poisons, produced no considerable alteration of the health, if we except a certain thickness and roughness of the voice, which moreover was more marked a few years ago. This phenomenon is very general among the arsenic-eaters.

"I subjoin here an extract from a letter of a clergyman, A**** de M***, who reports concerning this fact—'The information I have obtained shows that the individual in question carefully concealed his secret from every one; it was generally said, however, that it was a case of arsenic-eating. This man is 55 years old, appears in very good health, is strong, and has never been seriously ill, but he is always *hoarse*. He conceals the use of arsenic through fear of encountering the rigor of the law by the possession and

employment of this poison. He would find himself deprived of a remedy indispensable to his health, and would be unable to obtain it. It is said that he increases the dose at the new moon, and diminishes it as she wanes.

"The manner of taking the arsenic varies much with different toxicophagi. Some take their dose all at once, allowing it to dissolve slowly in the mouth, and on an empty stomach. Others reduce it to powder, and sprinkle it on bread, or on a small lump of fresh lard. Most of them observe the lunar phases, which play so important a part in popular therapeutics, and suspend, or considerably diminish the quantity of arsenic towards the end of the moon. Those who use it to facilitate the mounting of ascents, take it at the moment of starting, without regard to the lunar period.

"I cannot refrain from alluding here to an attempt at poisoning which was reported in several journals, if I mistake not, towards the end of 1852, or the beginning of 1853.

"A domestic at a country seat in the north of France, desired to rid himself of a superintendence which he found too severe. For this purpose he mixed arsenic with the food of a lady for a considerable length of time, hoping to be able to avoid every suspicion of murder by the slow operation of the poison and of the symptoms which resulted from it. To his great astonisment he beheld the lady gaining visibly for several months in flesh, appearance and spirits. Perceiving that the small doses produced a contrary effect to that which he desired, he mixed a much larger quantity with some fricasee chicken. The violence of the symptoms speedily produced by this dish led to the discovery of the attempt at poisoning, and of its author, who was arrested. In this case we see the same phenomena presented by the toxicophagi of our countries.

"At the time of my first communications on this subject, I was acquainted with arsenic-eating only in a small district of Lower Austria and Styria; since then I have received communications from other and highly respectable sources, from which it appears that the use of this poison is pretty generally spread in the mountains of Austria, of Styria, and especially at Salzbourg, and in the Tyrol, among the chamois-hunters. M. Schneider, in his work on "Chimie Legale (pp. 169, 1851), speaks of this, and refers to the large doses of arsenic prescribed by some physicians without evil effects. While this article was in the printer's hands, the following very interesting communication reached me from a friendly and highly respectable

source :—" M. F*** St***, director of the arsenic mines belonging to a wholesale druggist, M. F. S., at M***kl, in L**au, has taken every morning for many years, a small pinch (as much as the point of a knife will hold) of powdered arsenic, to preserve himself against the pernicions effects of the manufacture of arsenic. This gentleman sent to a distinguished Physician of the place one of these pinches, which he takes openly, and this quantity weighed three and a quarter grains. Consequently he ingests daily from three to four grains of arsenic, and he enjoys excellent health. It is said that he furnishes his workmen with a system of rules on the manner of using arsenic as a prophylactic against the injurious effects of the mining of this poison.

Let us now pass to animals. Horses are those to which arsenic is most generally given. I have already explained the object of this practice, and I will complete my communication by describing the mode of proceeding. Every groom has a different way, but each adheres rigorously to his method once chosen ; and all agree on this point, that arsenic ought to be administered to horses only at the new moon. Some give it daily at this time, in the dose of three or four grains. Others administer it until full moon, two days at a time, suspending it during two days, and then increasing the quantity the next two days. During these intervals they give the animals, once a week, an aloetic purgative. These people observe rigorously the rule to give arsenic to horses only after giving them food and water. A piece of bread serves as vehicle for the arsenical powder. If the animal is to take arsenic while in use, a piece is wrapped up in linen, or some of the powder is scattered on lard also enveloped in linen, and the whole is attached to the bit or bridle. It appears that a part of the poison is eliminated with the excrements, for it is often noticed that chickens die after eating the oats contained in dung of horses subjected to an arsenical regimen. The grooms pretend that arsenic is an infallible preventive against the cholic of horses fed on rye, which is well known to predispose to this affection.

" The use of arsenic for horned cattle is less frequent ; it is only given to oxen and calves intended for fattening. The precautions respecting the lunar phases above described, are equally observed, and the arsenical powder is given to the animal with oat meal mixed with chopped straw, and infused in warm water. The effect is very surprising as to the increase in the size of the animal, but he does not gain proportionably in weight. For this reason the butchers

rarely buy cattle fattened in this manner, by the eye, for the real weight is inferior to that which might be inferred from the appearance. It is needless to remark that this process is only employed for cattle intended for fattening, and never for draught animals. In Styria, as well as in Austria, there are farmers who, on account of this practice, are known by the name of *hidri-bauer* (arsenic-peasants). Arsenic is often given in small doses to hogs, especially when beginning to fatten them; a dose of the sulphuret of antimony is given daily. It has been found that the *purified* sulphuret of antimony (*antimonium sulphuratum nigrum lævigatum*), such as is prepared by the druggists, is inert, and that it is only the wholesale article which exerts its known effect. This may be owing to the not insignificant quantity of sulphuret of arsenic usually contained in the latter article.

"It will be seen that the employment of arsenic with animals is subject to the same rules observed by the toxicophagi themselves. It would not be uninteresting to know whether the beneficial effects of small doses of this poison in animals has led to experiments on the human subject, or *vice versa*, if this practice passed from the province of human therapeutics to that of animals."

Note by the Editor.—It is to be wished that scientific men living in the localities where the *arsenic-eaters* are said to be found, would confirm or deny the facts advanced by M. Tschudi.—*Boston Medical and Surgical Journal.* A. Chevallier.

Art. II.—*The Sugar-House Cure for Bronchial, Dyspeptic and Consumptive Complaints.* By Samuel A. Cartwright, M. D., New Orleans.

Cane-juice kills Animalcules—Its vapor respired promotes Nutrition and the cure of Bronchial and Consumptive Complaints—The Case of the Pale Man—Cautions against expecting too much or too little.

An article lately forwarded to the Boston Medical and Surgical Journal, closed with an argument in favor of the direct application of the ferment called *dunder* (the elements of which are contained in the vapor of boiling cane-juice) to the mucous membrane of the air-passages, softened or thickened in bronchial and consumptive affections, drawn from the analogy of the good effects of the ferment, called *yeast*, in certain morbid conditions of the mucous mem-

brane of the alimentary canal, occurring in some forms of typhus and typhoid diseases. It was mentioned, however, that analytical reasoning was not a safe guide in therapeutics, and some higher evidence of the virtues of the sugar-house remedy was promised. It may be well to premise, that the alcoholic liquor known as rum, is obtained from sugar alone; the ferment called *dunder*, being an aromatic substance obtained from the skimmings of boiling cane-juice; "which is," says Mr. Wray, "only necessary to assist in the decomposition of the sugar in its metamorphosis into rum."—(Practical Sugar Planter, by Leonard Wray, Esq., page 297. London: Smith, Elder & Co., 1848.) Dr. Thompson, in his Clinical Lectures on Consumption (page 55, Philadelphia: Lindsay & Blakiston, 1854,) speaking of the ferment called yeast, says: "It often gives relief as a gargle to the sore throat of scarlatina; and its remarkable power of separating sugar from its combinations, and altering its character, might lead us to anticipate its possessing properties competent to influence favorably the digestive process," &c. But the ferment called dunder, is not the only substance inhaled in the vapor arising from boiling cane-juice. Arequin, a French Chemist, of New Orleans, whom Liebeg, Dumas and Gerhardt quote in their works as the very highest authority in the analysis of cane-juice, has discovered a peculiar principle in that liquor, which he calls *cerosie*. He says it is an unique natural alcohol, and presents the only instance known in nature of an alcoholic substance being produced without artificial agency. The new and wonderful science of optical chemistry proves that one of the chief constituents of the liquor in the clarifiers, from which the fragrant, saccharine vapor arises, has the power to rotate the plain of polarization of polarized light 100 degrees to the right. It requires nothing but credulity to believe in spirit-rapping and table-turning. Someting more is required to understand the beautiful and wonderful phenomena revealed by optical chemistry. They should be understood before it can be expected that strong minds, bolted and doubly barred against humbugs, will receive the truth in regard to the virtues of the inhalation of the vapor of boiling cane-juice in bronchial, dyspeptic and consumptive complaints. It is all right that the door of the temple of science should be locked against alleged facts, contrary to reason and analogy, as those of homœopathy, &c., the admission of which would ignore better-established facts and crowd all others out; but it is a narrow prejudice which would exclude, without examination,

new facts brought to light by the inductive philosophy, that so far from being in opposition to other long-received and well-established facts, confirm, harmonize and explain them more fully.

According to the experiments of Carminati (Opus Therap.), confirmed by Magendie, the essential salt of cane-juice destroys such cold-blooded animals as toads and lizards, whether applied externally or given internally. There are also many conflicting facts in regard to the virtues of sugar—some proving that it breeds worms, causes scurvy and injures the teeth; others that it destroys worms, cures scurvy and whitens the teeth. These facts are reconciled by the discovery of the two kinds of sugar—the *dextrogyrate* and the *lævogyrate*. I took an alligator to the chemical laboratory, requesting Mr. Riddell to try if the respiration of carbonic acid gas would kill it. After trying the gas upon it for a good part of the day, it was brought back as lively and vigorous as ever. It was thought that owing to the size of the animal, the vessel it was put into might have contained a small portion of atmospheric air. I then gave it some pure dextrogyrate sugar from the plantation of P. M. Lapice, Esq., being some of the same parcel which was made *by first process*, and rotated 100 degrees to the right. Also a solution of it was smeared over its body. This was in the evening. The next morning the alligator was found perfectly dead.

About this time Prof. Riddell was engaged in looking into a new world, invisible to the naked eye, through his powerful microscope. The sediment taken from the gutters was found to be alive with rotifera and various other hideous looking animalculæ. The most numerous amongst them was a species of the *Euchlanis* and the *Leucophrys patula*, described by Pritchard in his "Infusorial animalcules, London, 1852." They briskly moved through an algoid substance, called by the professor *ocillaria*. He fed them with various matters, such as carmine, which they devoured with the same rapacity that hungry, ravenous beasts, in the visible world, devour their food. He fed them on human blood, which they gobbled down with a keen relish. At length I handed to the professor a stock of mature cane, just cut from the field of a sugar plantation. He squeezed some juice out of it, and put a speck into the nidus of these ravenous animals. It killed the whole of them as quick as lightning. Young Riddell, a smart boy about 12 years of age, suggested to his father, the professor, to try to bring them to life by the same means that he had brought others to life, killed with chloro-

form. He tried, but could not bring them to life. They were dead. Among them was a nondescript animalcule resembling a tape-worm. It did not die instantly as the others did, but all it joints came apart, and in a few seconds every joint was dead.

There was then lying in Toulouse street, in the heart of the French part of New Orleans, an exile from la belle France, whom the auscultators of Paris, headed by Louis, had banished from his country at the age of 23. The sea voyage, change of climate, and success in business, averted the disease of the lungs for which he had been banished. A number of years passed away in the enjoyment of health. But at length in the year 1852, after he had accumulated a competency, and the stimulus of necessity was withdrawn, the lung disease returned with redoubled violence and soon disqualified him for business of all kinds, and confined him within doors, coughing and expectorating his life away. Racked with pain and burning with hectic, he left the inland town in which he had been residing, came to New Orleans, and took rooms on Toulouse street, to die, as his friends thought, among the French people. His friends converted his effects into cash. His disease had made such progress, that opium, aconite, prussic acid, and such things, were regarded as the only remedies that could palliate his sufferings. For several long months he had been confined to his room. On his removal to the city he consulted me. I had just despatched my first article on the sugar-house cure to Boston—and endeavored to prevail on him to try the sugar-house remedy. I did not regard his case in the same unfavorable light that others did, whose opinions are entitled to respect. Although there was some purulent expectoration, yet the copious quantities of mucous, viscid matter exporated, indicated that bronchitis had more to do with the complaint than tubercular softening. The loud sounds from the abundant mucous, thrown off by the relaxed lining of the air-passages into the dilated bronchial tubes did not frighten me at all. Nor did the hectic fever and sweats. These are small matters when not caused by tubercular softening, organic lesions, or cavities in the lungs. Convinced by a careful examination of his case that there was no great or irreparable lesion of the pulmonary substance, but that the chief difficulty consisted in an imperfect hæmatosis, owing to the cells and smaller air-tubes being obstructed with a tenacious mucous exudation, and that the throat affection, as well as the softened state of the mucous membranes, were effects of the mal-assimilation of the

blood, from defective hæmatosis, the sugar-house cure was strongly urged upon him. All his French friends seemed to be armed against it. "It would bring on diarrhœa." "It would sweat him to death." "He would catch his death of cold, if he were to leave his comfortable quarters to encounter the discomforts of a sugar-house." "Where was the authority of the American doctor for advising such a measure?" Alas! he had none; not even among his own countrymen, the American physicians up town. Not one of them believed in the sugar-house cure. "If there were anything in it, it would have been discovered before." *It had been discovered before!* The sugar-makers, overseers and planters, of observation, had discovered it before. The lean, dyspeptic, coughing adults, and wormy, scrofulous, and emaciated children, have been repeatedly sent into the sugar-house by intelligent planters and overseers, during the rolling season or cane harvest. Those among them, able to work, were always put over the kettles to skim the boiling cane juice. They were observed to get well and fat. But these facts had not found their way into medical books, and hence were passed unnoticed by the profession. They had not got to London or Paris, and nothing can be valuable in science, according to some, which has not got the London or Parisian stamp on it. After having despaired of getting the Toulouse patient in a sugar-house, I witnessed the above-mentioned experiment on the animalcules. Filled with enthusiasm sufficient to conquer obstacles, I went to Toulouse street, and quickly overcoming all opposition, I had the patient in a sugar-house in a very short time thereafter. In sending him to a sugar-house, I sent him to one of the very best—to Mr. Lapice's plantation, in the Parish of St. James, where sugar is made by "*the first process*," on the very day the canes are cut down. Time passed by, and at length, on the 2d of June, 1853, Dr. Dowler called and inquired of me who that "*pale man*" was, who was present the day before at the vivisection of the four alligators? As several pale-looking physicians were present, I inquired which one he meant? "The one," he replied, "who made several important suggestions while the experiments were going on, was perfectly at home in anatomy, and well posted up in the very latest physiological researches of the savans of Europe. He speaks English with an accent. Where did he come from?" From Lapice's sugar-house, Parish of St. James, Louisiana, was the reply. He went to the sugar-house from Toulouse street, where his friends in the autumn of 1852, had prepared

rooms for him, and had made arrangements for the supposed dying man to have every comfort and consolation that this city could afford, and at the same time to be in a part of it where his native French is chiefly spoken. The auscultators had banished him from Paris, his native city, and I banished him to a sugar-house. Three months or more before coming to Toulouse street, he had been confined to his house, and disqualified for all business, by reason of the chest affection, and the cough, fever, debility and emaciation that attended it. Since the vivisection of the four alligators, upwards of fifteen months ago, "*the pale man*" has been actively engaged in the practice of medicine in town and country, in the enjoyment of pretty good health, with the exception of an attack of yellow fever which he passed through without detriment to his constitution. Dr. Chapellier, of Natchez, would scarcely be recognized, in 1854, as the pale, emaciated patient of Toulouse st., with the church-yard cough, in the year 1852.

Other remedies, of course, were used in the treatment of his case, but the inhalation of the vapor from the boiling cane-juice, was worth more than the whole of them put together. It let in the air to the air-cells of the lungs, by disembarrassing the bronchial tubes of the viscid mucous which shut it out. It removed the pathological condition of the lining membrane of those tubes, consisting of softening and thickening, on which the abnormal secretion of mucus depended. That it did so, is inferred from its speedy effect in giving strength to the voice. It put flesh on the patient's bones by virtue of the physiological relation, much overlooked, between the functions of assimilation, nutrition and *respiration;* perhaps also by the direct absorption of the nutritious matter, contained in the vapor, into the nutritive fluids of the body.

There are many facts to show that persons respiring the saccharine vapor from the boiling cane-juice, gain flesh and lose much of their appetite at the same time. Mr. M., from Watumka, Al., mentioned in the author's last article, as shown to Prof. Riddell and others, is an instance. In that article, Mr. Wray, by mistake, was incorrectly quoted as attributing fattening qualities to the vapor. In the "Practical Sugar Planter," page 21, chap. xi., "*On the Cane plant,*" speaking of its essential salt, Mr. Wray says: "Its nutritious and fattening qualities are abundantly shown on every sugar-estate in the world; however, as this admits of no doubt, I need not dwell on so clear a fact." In the author's first article, he show-

ed that it could not be the sugar or essential constituent of the cane-juice which fattened; because it is only on sugar-estates that it is observed, and only on *them* during the rolling season, and moreover only *among* that class of persons on the sugar-estates breathing the vapor. It has now been two years since the subject was brought before the regular medical profession through an old and well-established Medical Journal. The author's humble contributions to science have attracted more attention from the faculty, and have been more favorably noticed by medical writers and the organs of the profession, than he had any reason to hope or expect; and, with two or three exceptions, they have done him more than justice. His sugar-house remedy is one of the exceptions—the public press having nearly killed it with kindness, and given it a notoriety causing the faculty to regard it as a humbug. The proofs, that inhaling the vapor of boiling cane-juice or something or other in a sugar-house during the rolling season, fattens, are overwhelming and convincing. It is not the voice of London or Paris, changing its tones as fashion changes, and often contradicting itself, that is speaking; but Nature herself, uttering the same voice, and declaring the same fact through the lapse of ages, throughout the entire sugar region of the eastern and western continent. To that voice, the highest of all authority, the humble author, seeking nothing and fearing nothing, has invoked the profession to listen. It tells of something most important to the physiologist, and which may be—nay, which has been found to be—highly useful in the treatment of bronchial, dyspeptic and consumptive complaints. If the inhalation of the vapor could only cure one case in a hundred that could not be cured without it, it would be worth the attention of the profession. Yet scarcely any of the regular faculty have noticed it. The editors of the various medical journals have quietly sat by and seen garbled quotations and misrepresentations of the original paper on the sugar-house remedy, going the rounds of the newspapers, in Europe and America, without any attempt to correct them. The consequence is, that many unfortunate individuals, in the last and hopeless stage of consumption, with large cavities in the lungs, have been, and may yet be attracted into the sugar-houses, under the mistaken belief, gathered from abstracts and notices in the public press, uncontradicted by the medical journals, that the author has recommended the inhalation of the vapor of boiling cane-juice as a sure cure for consumption, regardless of its stage. Whereas he has recommend-

ed no such thing. The author's article on cholera shared the same fate. Scarcely any of the medical journals noticed it at all, and their readers, the physicians, were mostly left to form their opinions of that paper, as the one on the sugar-house vapor, from what they saw in the public press; and the author has grounds to believe that many of them, seeing so much said in the newspapers, and nothing in the regular organs of the profession, have been so far misled as to do him the injustice to suppose that he has been writing articles in the newspapers to instruct the public how to cure themselves of cholera, consumption, &c., without the aid of physicians. Whereas, the truth is that he has addressed himself all the time to the physicians, through their regular organs, and not to the public through the daily papers. It is true that an essay on the cholera, written for a medical journal, but being too late, was published at his own expense, in pamphlet form, expressly stating that it was "*addressed not to sophomores or pretenders, but to intelligent and well-bred members of the profession,*" and also instructions to planters what medicines to provide themselves with, how to prepare and preserve them from injury, and how to use them in cases of emergency until a physician could be had. There is nothing unprofessional in this, because in the south-west the planters are their own apothecaries, and depend upon their physicians to give them instructions what medicines to get, how to compound and divide the same into doses, and what to do in case of emergency. Physicians do not furnish the medicine or carry it with them, as in country practice elsewhere, but each plantation is provided with its own apothecary shop on a larger or smaller scale, and a person to put up and prepare the medicine under the physician's instructions. The author exercised the right of consulting Hippocrates and the great fathers of medical science, and on their authority restored to the plantation apothecary shops a family of plants, which the Edinburgh physicians about a century ago, had, in a great degree, excluded from regular practice, in consequence of their experience having found them to be too exciting for the hot, inflammatory diseases of that high latitude; but their experience did not ignore the experience of the regular medical profession of the preceding two thousand years—declaring the *piper longum* and the *piper nigrum* to be valuable therapeutic agents in the cold, congestive diseases of countries farther South. The Edinburgh school had no more right to *reform medicine* by excluding those aromatic stimulants, derived from the pepper family of plants, from

regular practice, than the botanical school to exclude mineral medicines. Standing on the eternal rock of this self-evident truth, the author has no apology to make for his use of strong aromatic stimulants in full doses, or for combining them with camphor and calomel, in the first stage of cholera, before the vital forces have become too much impaired for a salutary revulsion to be made to the surface. But he has an explanation to make to the profession how it happened, that a method of treatment, which in his hands, and many others, has proved far more successful than any other in preventing mortality from cholera, should have fallen into discredit with so many intelligent physicians.

Some years ago, during the cholera excitement, a letter from the pen of the Hon. Robert J. Walker, then Secretary of the Treasury, was published in New York, detailing his recollection of the author's treatment of that disease, as witnessed by himself. The remarkable and wonderful success truly attributed to it by a prominent member of the cabinet, caused it to be used in the first cases of collapse cholera that occurred in New York and many other places. The great error was in using it in collapse at all. It was not in collapse or the last stages that the Hon. Secretary had witnessed its wonderful effects, but in preventing collapse—by its being resorted to in the very first stage of the painless diarrhœa, so apt to run into the hopeless, pulseless stage, unless arrested by timely and efficient means to make a revulsion to the surface. It forthwith fell into disrepute, because it did not come up to the extravagant expectations of those who resorted to it in the blue, pulseless cholera; a stage of the disease in which the author himself never relied upon it. In the last stages of that, as in other diseases, *no powerfully perturbating method of treatment is admissible.* It does no good, and often hastens the fatal catastrophe. The author tried to correct the error, that newspaper versions of his opinions and practice in cholera had led to, but it was too late. What he said was not heeded, but what others, misunderstanding him, had said.

The author has never recommended the sugar-house remedy as a cure for consumption in its last and hopeless stages; but newspaper misrepresentations and incorrect abridgements, altering the sense more or less of what he did say, have done it for him, and will assuredly bring the sugar-house cure for bronchial, dyspeptic and consumptive complaints into disrepute unless timely corrected. The precise limit of the efficacy of the inhalation of the vapor of boiling

cane-juice, in opening the obstructed bronchial tubes and in influencing favorably their mucous lining, is not yet ascertained; but that it possesses some remarkable virtues in this respect, there is much good evidence to prove.

The strong-minded woman from Boston, in a sugar-house, with bronchitis, and other ills, comes next.—*Boston Med. and Surg. Jour.*

Canal st., New Orleans, Sept., 7, 1854.

ART. III.—*Post-Mortem Appearances in Cholera.* By ISAAC PIDDUCK, M. D.

In the year 1832, meeting Sir Astley Cooper in consultation, I inquired if he had seen any cases of cholera? No, he replied, but that he had seen several *interiors*. His description of the post-mortem appearances so exactly tallied with those recorded by Dr. Robinson, of Newcastle, that the specific character of the disease after an interval of twenty-two years, remains precisely the same. The two points upon which Sir Astley Cooper remarked were, the inflammatory condition of the stomach and intestines, and the distension of the gall-bladder; and these are the prominent appearances, recorded by Dr. Robinson, and which have presented themselves in almost all the cases of cholera which have been examined. As the only successful practice is based upon correct pathology, I at once determined to treat the disease according to the post-mortem appearances. In each successive irruption of cholera, this rule of practice has been my guide, and the success which has attended it has encouraged me to persevere.

Of the nature of the poison which causes this morbid condition of the alimentary canal and distention of the gall-bladder, we are as ignorant as we are of the nature of certain ophidian poisons, which cause pneumonia, or destroy the coagulating quality of the blood; but the indications for the cure of cholera are clearly—

First, to empty the distended gall-bladder; and second, to allay the inflammatory condition of the stomach and bowels.

To fulfil the first indication, the salt emetic is the safest and most effectual. If this be followed by calomel and rhubarb, copious bilious evacuations will be procured, and with them all the dangerous symptoms of the disease will subside. To empty the gall-bladder is essential to the patient's recovery; for if re-action be established

without this emptying of the gall-bladder, bilious fever sets in, and proves as fatal as the cholera itself in the stage of collapse.

The second indication—to allay the inflammatory condition of the bowels, and also in evacuating the contents of the gall-bladder—is fulfilled by the saline treatment prescribed by Dr. Stevens, assisted by the calomel and rhubarb.

In this unwonted disease there are two strong instinctive desires on the part of the patient—the one is for cold water, and the other is for salt, or more properly for the saline powders. Therefore the desires of the patient may be safely gratified, and cold (iced) water allowed, *ad libitum*. If the view I have taken of this dreadful disease be correct, it is obvious that all endeavors to promote reaction by means of *stimulants*, and to stop the natural efforts to unload the gall-bladder by means of *astringents*, must be worse than useless; they must inevitably tend to seal the fate of the patient, by locking up within him the *casus morbi*.

The same principle should guide us in the treatment of the premonitory diarrhœa, which is cholera undergoing a natural cure. In innumerable cases, a small dose of calomel and rhubarb, followed by castor oil, by carrying off the redundant secretion of bile, arrests the diarrhœa at once; whereas if it be stopped by astringents and sedatives, a simple disease becomes complicated, and a bilious diarrhœa exchanged for a bilious fever of a grave character.—*London Lancet.*

ART. IV.—*Extracts from an Unpublished Report on the Medical Literature of Kentucky.* By LUNSFORD P. YANDELL, M. D.

DR. DANIEL DRAKE, though a citizen of Ohio at the time of his death, spent a large portion of his active life in Kentucky, and is justly claimed by her as one of her Medical Authors. Having returned to his practice in Cincinnati, in 1818, at the breaking up of the Medical Faculty of Transylvania University, of which he was a member, and having engaged in an unsuccessful effort to rear a Medical School in that city, he was induced to accept again the chair in Lexington, which he had resigned five years before. His first connection with this school gave rise to nothing of a public professional character that merits any notice in this Report, although

previous to this time Dr. Drake had become an author of note. His "Picture of Cincinnati" had made him known to scientific men abroad, and he returned to Transylvania University with a high reputation for ability and learning. The public Lecture which he delivered introductory to his first course on Materia Medica, November, 1823, was published at the request of the Medical Class. The subject of the lecture was "The Incentives to Professional Study," and his manner of treating it was esteemed peculiarly happy. It was an eloquent discourse, abounding in thoughts calculated to excite the ambition and kindle the zeal of his pupils.

This inaugural address, we believe, is the only publication of which Dr. Drake's reunion with the Lexington Medical Faculty was productive. He resigned his professorship in Transylvania a second time, in 1827, at the close of his fourth course of lectures. In 1839 he was invited to Louisville, to a chair in the Medical Institute, just then entering upon its third session, and we find him in the winter of that year lecturing on Pathological Anatomy and Clinical Medicine, and contributing again to the Medical literature of Kentucky. His valedictory lecture to the graduating class was published. The subject of the lecture was the importance of Clinical Instruction to students of medicine. It was determined by the Faculty soon after Dr. Drake came into the school, to revive the medical journal which had been suspended after the issue of the second number, and he consented to become one of the editors. The first number of the *Western Journal of Medicine and Surgery* was published on the first of January, 1840. The name is nearly the same as that of the Journal which he had conducted in Cincinnati to the tenth volume, and of which he regarded this as a continuation. The pages of the first number were enlivened by some characteristic editorial articles from his pen, in which light, off-hand work, where the pun, the anecdote, wit and humor, are blended agreeably with science, he greatly excelled. During his connection with the journal he indulged freely his taste for such writing. His "Traveling Editorials," as he termed them, letters written to his colleagues during his tours to collect materials for his great work since published, were read, perhaps, with as much interest as any other articles in the journal. He reported in the second volume (p. 343), a case of "Intermittent Fever, complicated with Hepatitis, Pneumonitis, Laryngitis, and Intestinal Irritation." He closes his history of the case with the following characteristic paragraph:

"To such of our readers as may think their time lost by the perusal of this article, we beg leave to say, that the afternoon (July 29), is oppressively hot; and that if we were writing in as pleasant weather as they will read, we should no doubt forestall them in that criticism."

At the Medical Convention held at Frankfort, in January, 1841, he read an elaborate memoir on "the Disease called by the people 'Trembles,' and 'Sick Stomach,' 'Milk-sickness,' as they occurred in the counties of Fayette, Madison, Clark, and Greene, Ohio." He proceeds first to show by "way of exclusion," what agents cannot give rise to the disease, and arrives, by this process, at the conclusion that it is probably engendered by the *Rhus radican.* In his first object he is entirely successful; he proves most satisfactorily that milk-sickness cannot originate in any of the causes that have been heretofore assigned; but in the second he seems to have failed as signally as any who had written on the subject before him. His memoir, however, is a model of such investigations, and will be read with interest by those who are curious about the question of which it treats.*

The same Journal (vol. 6, p. 401), contains an interesting paper, by Dr. Drake, the title of which is, "The Northern Lakes, a Summer resort for Invalids of the South." Its suggestions are judicious and important. It is written with the freshness of a traveler who had beheld the charming scenery he describes, and with the sagacity and judgment, of an able, experienced physician.

In 1843 Dr. Drake engaged with a number of friends in the investigation of the phenomena of Mesmerism, which, at that time, was exciting great interest in Louisville. The point to which his attention was particularly directed was *clairvoyance.* In order to test the reality of this alleged faculty, he arranged that several gentlemen should write down a series of topics to be presented to the "subject" when in the mesmeric state, by reference to which, the answers being recorded, it would be seen whether the person mesmerized had before his mind the objects in the mind of the individual "in relation" with him. The test was fair, and at the same time decisive. The result was a conviction on the part of the majority of the committee, that there was no remarkable coincidence between the answers of the "subject" and the objects in the mind of the

* See Western Journal Med. and Surg., vol. iii.

questioner. Dr. Drake published a detailed account of the inquiry under the head of "Analytical Report of a Series of Experiments in Mesmeric Somnambulism."* It will, perhaps, strike the reader as tedious, but it is conclusive of the question. The experiments proved that all was guess beyond what was suggested to the mind of the "subject" by the individual asking the questions. This Dr. Drake exhibited most clearly in a subsequent paper on the subject, entitled "Speculations on the Facts presented in the Analytical Report on Mesmeric Somnambulism." He shows in this article that a large proportion of the answers returned were not correct, that many were vague, and that those which seemed to favor the idea of clairvoyance were suggested by the question proposed. We have rarely read a paper displaying greater mental acumen than this, and we could not point to one which exhibits more of the peculiar traits of the author's mind. It will be found to contain the germ of the true theory of all those phenomena occurring in the conditions variously styled "clairvoyance," "biology," hypnotism," &c. The explanation is, briefly, that the mind of the individual in the mesmeric state is in a peculiarly ductile condition, and may be directed, at will, by the person who may chance to have his ear when he passes into this state; or, as explained by Dr. Carpenter, he is a "thinking automaton," having no will of his own, but being completely under the guidance of the person in relation with him. Whatever the questioner sees, a word will cause the "subject" to see. But we need not go into a fuller explanation. We have said this much because at the time when Dr. Drake submitted his "Speculations" to the profession, the subject was very imperfectly understood, and he has the credit of having discovered the clue to phenomena which, to many highly cultivated minds, appeared mysterious and wonderful.

In 1850 appeared his great work on the Principal Diseases of the Interior Valley of North America,† a work which he had meditated for forty years. As long ago as 1823 he issued a printed circular to the physicians of the South-west, announcing his purpose to write a work on the diseases of the Ohio Valley, and soliciting the contribution of results afforded by their experience and observation. Engaged as he has been since in the labors of practice, and engrossed

* Western Jour. Med. and Surg., new series, vol. i., p. 189.

† A Systematic Treatise, Historical, Etiological and Practical, on the Principal Diseases of the Interior Valley of North America, as they appear in the Caucasian, African, Indian and Esquimaux varieties of its population.

by the politics of medical schools, he has never lost sight of this noble enterprise. Amid all the changes through which he passed in the Medical Colleges of three States, his plans in regard to this great labor of his life have remained unaltered. The institution founded by his exertions in early life in the city which he loved, the image of which has pursued him in all his subsequent journeyings, and made him restless and dissatisfied in every other institution with which he has been connected—an image beckoning him still to return to his early home, and disappointing him still as often as he yielded to its importunity—has never been able to divert his thoughts from this cherished object. It shows great steadiness of purpose that, amid every distracting care and throughout the unquiet life of the most active of medical politicians, the plan of his book was kept constantly before his mind. It is fortunate for his fame that these exciting concerns never wholly engrossed his thoughts.

About nine years before his work appeared he set earnestly about collecting materials for its composition, by exploring personally the great region of which it was to treat. Connected at the time with the Medical Institute at Louisville, and not disposed any longer to engage actively in the practice of physic, he enjoyed in the long vacation of the school the leisure necessary to the extended journeys required by the arduous enterprise. In the spring of 1841 he commenced a series of excursions in which he visited a wide area of country on the Mississippi, Ohio, Alabama, Tennessee, Missouri and St. Lawrence rivers, from the Balize to the Indian territory in Missouri, and from Pensacola Bay to Lake Superior. In the course of his travels he sought out the medical men every where, and collected their observations respecting the diseases of their several countries. It was his purpose to see the Great Valley in all its aspects, and its population in all its varieties and grades of civilization. He saw men in Barracks and in Indian wigwams, and made observations on the Caucasian, the African, the Indian, and the Esquimaux. And in addition to all this, he has availed himself of the observations of other travelers in remote parts of the Valley not explored by himself, thus embracing in his treatise the medical topography of the country from Vera Cruz to the regions around Hudson Bay.

It was to produce a work on the diseases of the Interior Valley out of materials collected in the region where they prevailed, that Dr. Drake was making preparation through this long period and by this extended travel. He never thought of framing a treatise out of

other books. He meant that his work should be indigenous. No blind advocate of sectional medicine, he had yet observed enough to convince him that diseases were modified, to some extent, by the countries in which they prevailed. "That many physicians," says he, "overrate the degree of variation from a common standard which the diseases of different countries present, I am quite convinced; but feel equally assured that if the maladies of each country are studied and described without reference to those of any other, it would be found, if the state of medical science were equal in them, that the works thus produced would not be commutable, but that each would be better adapted, as a book of etiology, diagnosis and practice, to the profession and people among which it was written, than to any other."* It was his design to ascertain how far the diseases of the Interior Valley differed from the same affections as described by writers elsewhere, and to make his work faithfully reflect these diversities.

The causes that go to modify disease are soil, climate, and population. Dr. Drake discusses these subjects at great length, four-fifths of his great volume being occupied with their consideration. Many have expressed regret that he should have given such prominence to etiology in a work designed for practical men; but to have given it less space, or to have detached it from his treatise on the diseases of the West, as many would prefer that he should have done, would have been to abandon one of his most cherished ideas. He believed that the range of professional studies in our country was too limited, and it was his purpose to show, in this work, the full bearing of etiology upon practical medicine. He has presented the most extended system of medical topography to be found in any work extant. In accumulating and digesting this huge mass of details he was well aware that, for the majority of medical men, he was performing a profitless and thankless labor. He foresaw that by the many his design would not be understood. But it was his theory of medical science, and no fear that his book would be less popular interfered with his putting it into practice.

As among the elements of Etiology, he begins with the mineral geology of the various regions described, holding that this is the proper basis of medical topography. It is well understood that the character of surface influences materially the health of a country, but

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*Introd. Interior Valley.

no writer has indicated so clearly the relations of geological to medical science as Dr. Drake has done in this treatise.

He devotes two hundred pages of his work to the climate of this great intramontane plane. And finally he presents a comprehensive view of its hygiene, or physiological and social etiology. He treats the subject not in a general way, but with special reference to our own population, the facts and conclusions having been derived from the author's own observation. As the climate of every country possesses something peculiar, so there are peculiarities in the hygienic condition of every people; and in one element at least the population of the Great Valley stands more conspicuously than any other people upon earth; for where else, as Dr. Drake has pointed out, was there ever before such a commingling of races? Four out of five of the grand varieties of the human family are here—the Caucasian, African, Indian and Mongolian; and we have every branch of that family which stands first among the races—English, Irish, French, Italian, German, Scotch, Spaniard, Pole, Norwegian, Swiss, Swede, Hollander, Welch, and Jew, united here to form one great Caucasian family. For a century they have been mingling with each other and with the aborigines of the country, and the process of amalgamation which has been going on among men from the earliest ages, as shown by Dr. Drake, must go on in an accelerated ratio and here attain its final consummation.

"The great Central Valley of North America is the best crucible into which living materials, in great and diversified streams, can be poured for amalgamation. The double range of mountains which separate it from the Pacific Ocean, leave too little space for empire on that sea; and the detached communities which may there grow up, will be but deviations from the homogeneous millions, with which time will people the great region of the Appalachian and Rocky Mountains, which is thus destined to present the last and greatest development of society."

Such are the broad, philosophical views in which this treatise of Dr. Drake abounds. This work is no compilation; it is no mere technical treatise on disease, but a scientific account of the characteristics of the great West, geological, ethnological, sanitary and climatorial.

The gifted author had the second volume of his treatise nearly ready for the press when summoned away from the scene of his earthly labors. His last published work was a small volume con-

sisting of two Discourses, delivered before the Cincinnati Medical Library Association, in January, 1852. In the first of these he gives a biographical sketch of the early physicians of Cincinnati, with some incidents in his own eventful life; the subject of the second discourse is "Medical Journals and Libraries," of the rise of which he presents an interesting history.

The style of the first is light and sketchy, adapted to the simple annals which it was the purpose of the discourse to record. The second discourse abounds in fine reflections. In the following remarks, so full of the true spirit of philosophy and glowing with poetical beauty, the author might be supposed to be giving a description of himself:

"The enlightened aspirant for medical distinction is but little taken with the applause of the present moment, unless he perceives that after it has passed away there will remain some enduring element of fame—some solid and undecaying trunk, with fruit-bearing branches, which might have been overspread and hidden by a gorgeous drapery of leaves and flowers that enraptured the gazing populace for a day, but had no charms for him. When we feel in our hearts this indifference to the fleeting, and this warm regard for the permanent, let us believe that God has implanted the instinct for a wise and good purpose; and then follow it as a heavenly guide."

And again—in speaking of that class of medical works to which his own treatise confessedly belongs, he says:

"The true and healthful bibliothecal element of the mind consists of monographs, reports of original observations, and the systematic works which, in different ages, have presented the existing principles or acts of the profession, as they appeared to men of genius and experience. Such works have been at all times appearing and disappearing. They are not, like ordinary compilations, superseded by others of a later imprint, but a new generation overlooks them. They are like great men who have retired from the public gaze. They lie embalmed in the truths with which they are penetrated, and cannot decay; but like the bodies of king and philosophers, steeped in spices and deposited in catacombs, they are found only in the unfrequented closets and alcoves."

No one, we think, who will look patiently through the writings of Dr. Drake, will fail to come to the conclusion, that they are penetrated by truths which will preserve them from decay, and cause them to be referred to by the medical philosopher and historian of

future times. Our belief is, that few medical writers in our country have contributed to the profession a greater number of original observations, with a smaller admixture of error. In a diligent search through all his numerous publications it would not be easy to find one hasty, much less, absurd opinion, a single groundless hypothesis, or an idle speculation. He was a cautious writer. He was slow to avow his opinions. In nothing was he ultra. As a reviewer and critic he failed, because he was afraid to use the critical power which he possessed. He seemed reluctant to condemn or contradict. He speculated but little, and was never so much in his proper element as when putting forth his own observations. He loved research and phenomena. He was satisfied with nothing but facts. His mind was acute, analytical, and logical, and if he had given himself up to it, he might have made one of the keenest of critics. It was a mind for observation and generalization, and he kept constantly up with the facts of the science, at the same time that no one surpassed him in the readiness with which he grasped and applied general principles. To sum up all in one word—*Dr. Drake was a philosopher.* He embraced in his capacious mind the whole ample range of medical science. He was eminently safe as a teacher, because he was cautious, candid, laborious and truthful. His style is uniformly simple, easy, and natural, sometimes loose and careless, but occasionally, when his subject favored it, ornate, poetical and elevated. He had an active fancy, and his powers of description were of a high order, some of his pictures being models in their way. No one who has read it can ever forget his description of a "*doctor's shop*" as he was wont to contemplate it in the days of his pupilage, and as he still occasionally encountered it in his journeys through the country. The following description of the scenery of the Lakes is full of poetical beauty. He is describing what is seen from the ruins of Fort Holmes on the Island of Mackinac, and says:

"When the observer directs his eye upon the water more than upon the land, and the day is fair, with moderate wind, he finds the surface as variable in its tints as if clothed in a robe of changeable silk. Green and blue are the governing hues, but they flow into each other with such facility and frequency, that while still contemplating a particular spot, it seems, as if by magic, transformed into another; but these mid-day beauties vanish before those of the setting sun, when the boundless horizon of lake and land seems girt round with a fiery zone of clouds, the brilliant drapery of the skies

paints itself upon the surface of the waters. Brief as they are beautiful, these evening glories, like spirits of the air, quickly pass away; and the gray mantle of night warns the beholder to depart for the village, while he may yet make his way along a narrow and rocky path, beset with tufts of prickly juniper. Having refreshed himself for an hour, he may stroll out on the beach to listen to the serenade of the waters. Wave after wave will break at his feet, over the white pebbles, and return as limpid as it came. Up the straits he will see the evening star dancing on the ruffled surface, and the loose sails of the lagging schooner flapping in the fitful breeze; while the milky way—Death's Path of the red man—will dimly appear on the waters before him. Behind, in the street, a lively group of Canadian French of every shade of color between white and red, will gossip and shrug their shoulders; on one side, should the Indians, who still inhabit the shores of lake Michigan, be on a visit to the Island, he will hear the uproar of a lodge of drunken Chippeways, with the screams of women and children, and the cackling of frightened hens; on the other, will see the sober and listless Ottowa, sitting in silent vacancy of thought, on his upturned birch canoe; his wife within the tent spreading cypress bark and flag mats upon the ground, as lodgings for the night; while half a dozen children loll and play about the door, and as many half-starved dogs curl up among them. Surrounded by such scenes, the traveler begins to realize that he is a stranger; when suddenly a new phenomenon appears and fixes the conviction. Every object becomes more visible; and, raising his eyes, he beholds the heavens illuminated with an aurora borealis, where he reads in fantastic characters of strange and eccentric light, that he is, indeed, a sojourner in a strange land, and has wandered far from home and his friends in the sunny regions of the South."

Dr. Drake, as is too well known to the members of this society, died in Cincinnati, on the 6th of last November, having returned to the city of his choice, and to the school which he founded thirty-three years before. His great work was left incomplete, but in such a state that the second volume will soon be ready for the press. The presence of this eminent man at our last meeting will be remembered with interest by many who were present on that interesting occasion. We saw him there as he appeared a quarter of a century before—still vigorous, active, buoyant, full of enterprise and hope—a pleasing instance of faculties unimpaired at an advanced age.—*Western Journal of Medicine and Surgery.*

PART THIRD.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

Modern Treatment of Syphilitic Diseases, both primary and secondary, comprising the treatment of Constitutional and Confirmed Syphilis, by a safe and successful method. By LANGSTAN PARKER, Surgeon to the Queen's Hospital, Birmingham. From the Third and entirely re-written London edition. Philadelphia: Blanchard and Lee. Pp. 216. For sale by Riley & Co.

The above work, according to the author's testimony, is the result of observations in hospital and private practice, continued through a period of twenty years. In private practice alone, he states that he has treated over eight thousand cases.

From such opportunities for becoming acquainted with the disease, we would infer that the author's effort was no abortion. A perusal, however, of the work itself, will convince any one that it is one of merit, notwithstanding the vast amount of matter of a similar character, which has of late emanated from Vidal, Ricord and other syphilographers.

As is well known, John Hunter laid the foundation, in his Treatise in 1786, of most of the doctrines that now pertain to the pathology and treatment of syphilis. He regarded syphilis and gonorrhœa as varieties of the same disease. His list of remedies was very short. Mercury, with him, was the grand panacea for both forms of the disease. To apply it externally, and to administer it internally, until the system was saturated, was his practice. Hunter proved, by inoculation, the existence of a specific, morbid, animal poison, which doctrine has been espoused in the present day by Ricord and others. Strange as it may appear, this doctrine, or rather the facts of Hunter, have been denied, and all the phenomena of the disease attributed to "*syphilitic irritation.*" This was the doctrine of the physiological school of France. Having about the same amount of truth in it that characterized the speculations of the founder of that system, with regard to things in general, it, like all the rest, enjoyed but an ephemeral reputation.

Dr. Carmichael taught rather a mixed doctrine. He supposed many primary sexual ulcers due to a specific virus, such as that

for which Hunter contended; while, on the other hand, he thought he observed others that were due to the ordinary forms of irritation. Carmichael first drew the attention of the profession to the treatment of syphilis, without the use of mercury to the extent recommended by Hunter. In the constitutional forms, when the papular and pustular eruptions became scaly, he occasionally administered "*alterative doses.*" His reliance, however, was mostly on sarsaparilla, antimony, and the hyd. of potass. This practice has met the approbation of a great number of those whose opportunities for testing different methods have been very good. That much injury has been done by the too profuse and indiscriminate use of mercurials, there is not the least doubt; and that the disease will yield in the great majority of cases to antimony, hydriodate of potass., sarsaparilla, etc., there is now no doubt. It is well known that, in Sweden and Denmark, venereal diseases are treated on a plan called the "*cura famis;*" a plan in which diet alone is the remedy invoked. In favor of even this, there is much said by its advocates. This proves that many cases will result in a spontaneous recovery, without the use of drugs of any kind.

It hence becomes a fact, that syphilis can be scientifically treated, with mercury, or without it. A few cases require it, while, perhaps, the majority can be more safely managed with other things, less dangerous to the system.

The greatest property of a drug is, not that it will cure, but that it will cure *safely*. Mercury will undoubtedly cure syphilis, but it will also occasionally leave effects upon the system, that are worse than the disease it cured. In other words, "its wear and tear" is too great to be used without the greatest possible care; and when its place can be supplied by anything else, against which such objections do not apply, it is the duty of the practitioner to do it.

Much testimony might be cited in favor of the non-mercurial plan of treating syphilis, while in the primary form. Deswelles made observations on 8810 patients, treated without mercury, and he says the plan must be considered as the basis of all rational practice; but, he says, should the ulcers continue without disposition to heal, for twenty or thirty days, mercury should be employed to effect a cure. This, also, is the result of the experience of our author, drawn from the personal treatment and examination of 25,000 patients, in hospital and private practice.

The plan which the author pursues is, rest, low diet, mild opiate, and astringent washes—nitrate of silver, or sulphate of copper, cathartics, antimonials, etc.

The circumstances which, in his estimation, justify a resort to mercurials, are: 1. When a sore remains long open, and shows no disposition to heal. 2. When secondary symptoms appear before the primary form is cured. 3. In well marked indurated chancre—more especially, if this has been tested by inoculation. 4. In certain cases of rapidly spreading ulceration.

From what we have noticed, it must be evident that the work before us, although not by any means voluminous, must nevertheless be regarded as a judicious summary of what is most approved in regard to the pathology and treatment of syphilis, a disease now more common than small-pox, and characterized with ten times the amount of deterioration to the organism and its offspring.

Lectures on the Diseases of Infancy and Childhood. By CHARLES WEST, M. D., Fellow of the Royal College of Physicians, Physician to the Hospital for Sick Children, etc., etc. Second American from the Second Enlarged London Edition. Philadelphia: BLANCHARD & LEA. 1854. Pp. 476.

This work was sent to us by the Publishers some time since, and we intended by deferring any thing more than a notice of it, which was made at the time, to extract some of the more useful parts for the readers of the Journal. We find it, however, still impossible to do this, and merely call attention to it again, from a conviction that it is a work of merit.

The substance of the lectures was addressed to the pupils in Middlesex Hospital, in the summer of 1847. The observations were made in the large field presented by the Children's Infirmary, which was thrown open to the author in the year 1839. In 1842 the author assumed the entire medical control of the Institution, and he states by these arrangements that something near 14,000 children were treated in a period of nine years.

In getting up the second edition, the whole work has been carefully revised, and some additions made, the latter amounting to about fifty pages. Among other things, the present edition contains 199 post mortem examinations.

Among other subjects treated of in the work before us, is Inflammation of the Mouth—Stomatitis. We insert the following remarks as being practical in their character:

"Among the local accidents which complicate dentition, we noticed a condition of the mucous membrane of the mouth, which, though not attended by serious danger, is often the source of much suffering to the patient.

"Inflammation of the mouth, however, is an occurrence by no means confined to the period of teething, but it comes on in children of all ages, assumes very different forms, and leads to very different results in one case from those which characterize it in another. The mucous follicles of the mouth are the chief seat of the disease in one case, the substance of the gum in another, that of the cheek in a third. In the first, the affection issues in the formation of several small ulcers, which heal eventually of their own accord; in the second, an unhealthy process of ulceration destroys the gums and denudes the teeth, but it is tardy in its advance, and tends to a spontaneous cure; while, in the last, mortification involves all the tissues of the cheek, and spreads with a rapidity which remedies generally fail to check, and which is arrested at last only by the patient's death.

"Each of these varieties of *stomatitis* requires from us more than a passing notice.

"The first—the *follicular stomatitis* of some writers, the *apthous stomatitis* of others—is not met with either as a concomitant or sequela of measles, or as an idiopathic affection. In the former case it depends on the extension to the mouth of a state of inflammation similar to that which gives rise to the eruption on the skin; in the latter, it is often associated with obvious gastric or intestinal disorder. Under either of these conditions it is rare after five years of age; and though it often depends on causes quite independent of dentition, yet from the period when teething has commenced, to the end of the third year, is the time of its most common occurrence. When it constitutes an idiopathic affection, more or less fever, and restlessness, loss of appetite, and unhealthy state of the evacuations, and frequently a relaxed condition of the bowels, precede the local ailment for several days. Attention is generally called to the state of the mouth, by the child being observed to suck, or take food, with manifest pain and difficulty; while at the same time the secretion of saliva is greatly increased, and the sub-maxillary glands are swollen

and tender. The mouth is hot, its mucous membrane generally of a livid red, while a coat of thin mucus covers the center of the tongue. On the surface of the tongue, especially near its tip, on the inside of the lips, particularly on the lower lip and about its fold, on the inside of the cheek, near the angles of the mouth, and less often in other localities also, may be seen several small isolated transparent vesicles, or the ulcers which, after bursting, they leave behind. The ulcers are small, of a round or oval form, not very deep, but having sharply-cut edges; and their surface is covered by a yellowish-white, firmly adhering slough. When attention is first directed to the mouth, several of these small ulcerations usually exist, for the vesicular stage of the affection appears to be generally very short, while the ulcers are indolent, and sometimes continue for many days without showing any disposition to heal or to increase in size. The eruption of a single crop of vesicles, and the change of these vesicles into minute ulcerations, that heal in the course of time, do not complete the history of this affection, for while the mucous membrane in the situation of some of these ulcers at length resumes its natural condition, other vesicles appear, which again degenerate into little ulcers, and thus keep up the ailment, sometimes for weeks together. In some cases, not above five or six of these little ulcers exist at once, or they may even be less numerous, while it is very seldom that more than fifteen or twenty of them are observable at one time. By the successive appearance of fresh ulcerations, and the coalescence of several, an ulcerated strip of considerable extent sometimes forms, especially at the tip of the tongue, or on the lower lip. When the ulcers are healing no change in their aspect is observable, and they continue to the last covered by the same yellow slough, but by degrees they diminish in size; and seldom or never is any cicatrix observable in the situation which they occupied. In some cases the affection is complicated with a herpetic eruption about the edges of the lips, the vesicles of which degenerate into ulcerations similar to those observed in the interior of the mouth, and by their soreness add very much to the sufferings of the patient."

"Even though no remedies be employed, this affection shows no tendency to rapid increase, neither is it, in general, associated with any disposition to the formation of false membrane in the mouth, still less with any tendency to gangrene. It is sometimes a source of much annoyance to the child, but need never excite any serious solicitude, except when it occurs as a sequela of measles. In that

case, however, as was observed some days ago, it occasionally becomes associated with diptheritic deposits on the fauces, and with ulcerative inflammation of the larynx, though our anxiety is then excited less by the affection itself than by its concomitants."

"In the *treatment* of this affection, our attention must be chiefly directed to correcting the gastric and intestinal disorder by which it is accompanied; and when this object has been attained, the local ailment in many cases speedily subsides. The borax lotion mentioned in the last lecture is one of the best local applications that can be used; but if the ulcerations show no tendency to heal, it may be desirable to touch them once or twice a day with a solution of five grains of nitrate of silver in an ounce of distilled water."

"Between the mild affection we have just been studying, and the *second form of stomatitis*, to the examination of which we are now about to pass, there are comparatively few points of resemblance. This variety of the disease attacks the gums, and sometimes destroys them extensively, unlike the former ailment, which, even though it should continue long, seldom occasions any actual loss of substance. The process, however, by which the destruction of the gums is accomplished is one of ulceration, not of mortification—a fact which is of importance to bear in mind, lest we should fall into the error of some observers, who have confounded together under the name of Cancrum Oris, both this affection and that more formidable malady, true gangrene of the mouth. To preserve the distinction between the two diseases, it may be well, following the example of some writers, to apply to the former the designation of *ulcerative stomatitis*, or *Noma*, and to the latter that of gangrenous stomatitis, or gangrene of the mouth.

"It is by no means a constant occurrence for any special derangement of the general health to precede the attack of *ulcerative stomatitis*, though the children who are affected by it are seldom robust, and in many instances are such as have suffered from deficient food, or damp, unhealthy lodgings, or both. In children who are not very carefully tended, the ulceration has sometimes made considerable progress before its existence is suspected, and the profuse flow of saliva, or the offensive smell of the breath, is the circumstance which at length excites attention. Coupled with these symptoms, too, there is often considerable swelling of the upper lip, and the sub-maxillary glands are frequently swollen and painful. On opening the mouth, the gums are seen to be red, and swollen and spongy,

and their edge is covered with a dirty white, or grayish, pultaceous deposit, on removing which their surface is exposed, raw, and bleeding. At first, only the front of the gum is thus affected ; but as the disease advances, it creeps round between the teeth to their posterior surface, and then destroys the gum both in front and behind them, leaves them denuded, and very loose in their sockets ; but it is not often that they actually fall out. The gums of the incisor teeth are usually first affected : those of the lower jaw more frequently and more extensively than those of the upper ; but if the disease be severe, the gums at the side of the mouth become likewise involved, though it is seldom that the two sides suffer equally. Sometimes apthous ulcers, like those of follicular stomatitis, are seen on the inside of the mouth in connection with this state of the gums ; but oftener it exists alone. On those parts of the lips and cheeks, however, which are opposite to, and consequently in contact with, the ulcerated gums, irregular ulcerations form, which are covered with a pultaceous pseudo-membranous deposit, similar to that which exists on the gums themselves. Sometimes, too, deposits of false membrane take place on other parts of the inside of the mouth, the surface beneath being red, spongy, and bleeding, though not distinctly ulcerated. If the disease be severe and long-continued, the tongue assumes a sodden appearance, and is indented by the teeth, and the cheek, on one or other side, is somewhat swollen, while the saliva, though rather less abundantly secreted than at the commencement of the affection, continues horribly fœtid, and is often streaked with blood, the gums themselves bleeding on the slightest touch. But even if left alone, the affection usually subsides in the course of time, though it may continue almost stationary for days or weeks together, and this notwithstanding that the general health is tolerably good. It would be too much to say that this unhealthy ulceration never degenerates into gangrene : but though a very large number of cases of ulcerative stomatitis have come under my notice, I have seen only one instance in which it was succeeded by true gangrene of the mouth. When recovery has commenced, the disease ceases to spread ; the driveling of fœtid saliva diminishes ; the white pultaceous deposit on the gums, or on the ulcerations of the cheek or lips, becomes less abundant ; the ulcers themselves grow smaller ; and finally, the gums become firm, and their edges of a bright red, though still for a long time showing a disposition to become once more

the seat of the ulcerative process, and continuing for a little longer time to cover the teeth but very imperfectly.

"Various internal remedies and local applications have been at different times recommended for the *cure of this affection.* Tonics have been much employed, and the supposed analogy between this state of the gums and that which exists in scurvy, has led practitioners to give the preference to remedies reputed to be possessed of antiscorbutic properties. Lotions of alum, or the burnt alum in substance, or the chloride of lime in powder, have been used locally with more or less benefit. It was my custom also to prescribe these remedies in cases of ulcerative stomatitis; but since I became acquainted with the virtues of chlorate of potash, I have learnt to rely upon it almost exclusively. It appears, indeed, almost to deserve the name of a specific in this affection; for a marked improvement seldom fails to be observed in the patient's condition after it has been administered two or three days; and in a week or ten days the cure is generally complete. Three grains every four hours, dissolved in water and sweetened, is a sufficient dose for a child three years old; and five grains every four hours is the largest quantity that I have administered to a child of eight or nine. If the bowels be constipated, a purgative should be previously administered; but there seems to be no form, nor any stage of the affection, in which the chlorate of potash is not useful. The diet should be light but nutritious, and quinine or other tonics are sometimes serviceable if the child's health should continue feeble after the local malady has been cured."

The author's remarks on the subject of *Cancrum Oris* are very sensible. Unlike Ulcerative Stomatitis, this is very rare. Except in certain localities, the practitioner seldom ever meets with *Cancrum Oris,* or as the author calls it, *Gangrenous Stomatitis.* We had the good fortune to practice ten years before coming up with a single case. In malarious districts, the influence of which on children is perhaps more deleterious than upon adults, we think the disease in question is most frequent. Indeed, every thing that exercises a debilitating effect upon the general health of children predisposes them to attacks of disease involving the same condition of the system that obtains in Cancrum Oris. Besides malarious districts, these causes are in active operation in cities densely populated, also in families and communities poorly provided with the comforts and conveniences of life. Facts of this character incline us to the opin-

ions of the author that the complaint should be classed among those having their origin in an impoverished condition of the blood. From the circumstance that very many cases seem to happen after the health has been impaired by previous disease, such as measles, typhoid fever, ague, etc., it has been suggested that it may have an intimate relation to one or the other of these affections. This we imagine is only true so far as they operate to depress and enervate the system, thus predisposing it to all the forms of disease characterized with a want of cohesion in the solids and fluids. We insert the following from the author:

"Ulcerative stomatitis is an affection of such frequent occurrence, that many instances of it come under my notice every year, especially during the damp autumnal months; while it is attended with so little danger, that the only case which I have known to prove fatal was one in which gangrene of the mouth supervened upon it. *Gangrenous Stomatitis*, on the other hand, is a disease so rare, that I have only six times had the opportunity of witnessing it; but so fatal, that in five out of these six cases the patients died. The larger experience of other observers shows an almost equally unfavorable result, since twenty out of twenty-one cases that came under the notice of MM. Rilliet and Barthez had a fatal termination: and a recent French writer, who has collected from different sources 239 cases, which did not all occur in children, states that 176 of the number, or 75 per cent., terminated fatally. The formidable nature of the disease requires that we study it more closely than, considering the rarity of its occurrence, would otherwise be necessary; and it is the more important to do so, in order that we may avoid the not very uncommon error which confounds this dangerous affection with that comparative trifling ailment—ulcerative stomatitis."

"The constitutional disturbance which often precedes the other two affections of the mouth that we have just been studying, was seen to be generally of a trifling nature, and never so severe as to excite serious anxiety. Gangrene of the mouth, on the other hand, seldom comes on, except in children whose health has been already much impaired by previous disease, and especially by such diseases as are connected with important changes in the circulating fluid. In strict propriety, indeed, I doubt whether we ought not to remove both this and those other allied affections, in which the skin or the genital organs become the seat of gangrene, from among the class of local ailments, and refer them to the category of blood diseases.

Of twenty-nine cases of gangrene of the mouth, which MM. Rilliet and Barthez either observed themselves, or of which they found mention in the writings of other Physicians, only one appeared to be an instance of the disease in an idiopathic form; while in twelve cases it followed an attack of measles. Of the six cases which I have observed, and three of which I examined after death, two succeeded to typhoid fever, two to measles, one came on in a child whose health had been completely broken down by ague, and one supervened in a tuberculous child, who had been affected with ulcerative stomatitis, in a severe form, for many weeks. Though not confined to any one period of childhood, gangrene of the mouth is more frequent between the ages of two and five than either earlier or later. Of the six cases that came under my own observation, two were in children between two and three years old, one in a child aged three, one between four and five, one at six and a quarter, and one at eight years of age. Of the twenty-nine cases mentioned by MM. Rilliet and Barthez, nineteen occurred between two and five; ten between six and twelve; and M. Tourdes' comparison of 102 cases between one and a half and twelve years, likewise yields the greatest number during the third and fourth years."

Here we close our notice of this book. From the specimens given it is obvious that it must rank with the No. 1 works on the diseases of children. The author shows himself on every page of the work to be a careful observer, and also to possess the faculty of distinguishing between appearances and realities, sophisms and truths.

Elkoplasty, or Anaplasty, applied to the Treatment of old Ulcers. By Frank. H. Hamilton, A. M., M. D., Professor of Surgery in the Medical Department of the University of Buffalo, &c.

The above is a part of the title of a pamphlet received a short time ago, some thirteen pages of which are devoted to the discussion of a new method of treating old Ulcers, which consists in the transplantation of a flap of integument on the site of the affected part; and the author relates a successful case in proof of its utility. The exceeding intractableness of this class of affections, and their indispositon often to yield to any mode of treatment, render it extremely desirable, that some means should be discovered or devised, which promises better hopes of success. Anaplasty seems to offer a reasonable hope, and is, at least, deserving of a trial. The author says:

"Actual loss of skin is repaired by one or both of two processes. By the development of new, from or upon the free margin of the old skin, or by the contraction of the granulations and of the cicatrix, in consequence of which the adjacent skin is drawn towards the chasm, and made, as it were, to slide over and cover it in."

"This rule admits of but few exceptions. Occasionally, after a very long delay, the granulations acquire the power of forming new skin at various and isolated points of the sore. This process may now and then be observed in the healing of extensive burns, or, perhaps, in the closing up of an ulcer whose surface is excluded from the air. New skin may even find a matrix in the periosteum, as I have witnessed, and maintained several years since. (Buffalo Medical Journal, vol. vii, p. 205.) But the conditions are very rare under which these exceptions can occur. The rule remains as we have stated, and if ulcers are not closed by either the projection of new skin from the margins of the old, or by the contractions of the granulations and cicatrix, then, usually, they must remain open. To the action of both these processes there is, however, a limit. The formative power of the old skin does not extend beyond a few lines. The new vessels, becoming more and more attenuated as they stretch inward from the periphery, lose, at length, the power of generating epithelial cells, or, if formed, they are too imperfectly organized to sustain an existence, and they crumble away from the slightest provocation. Slowly, but perceptibly, the opaque diaphragm proceeds to shut in the granulations, and for a long time encourages a hope that a cure is to be accomplished. But just when the work is almost consummated, a rapid disintegration sweeps away in a few hours the patient labor of many months. Again and again the reluctant labor is renewed, and as often suddenly and without provocation, is it arrested and broken up. At the same time the granulations have ceased to condense, and the cicatrix to contract, either because these actions have attained their natural limits, or because the adjacent skin has reached its utmost tension, and affords effectual resistance to further stretching. Here the process of closure forever ends, and the 'old ulcers of 1830 will be old ulcers in 1860.' Nature has done its utmost, and hitherto art has failed to complete the work.

"I propose to close the ulcer by an operation of anaplasty. In short, to imitate one of the processes of nature, by sliding in old skin to repair a waste, where the process of forming new skin has ceased, and been finally given up."

"If we seek to obtain this supply from the neighborhood of the ulcer, around which the skin has already reached its utmost tension, we shall only substitute one ulcer for another. We must, therefore, generally look to the opposite limb, or to the limb of some other person, for the material with which the transplantation or engrafting is to be made."

"The mode of accomplishing this, will not differ materially from that which has been generally adopted in anaplasty from remote parts, except that the ulcerated surface ought to be excised freely before the new skin is laid upon it."

"By this means I hope, not only to supply an amount of skin equal to the size of the piece transferred, but to furnish also a nucleus from which additional skin shall be formed. I hope to establish a new center of life—an oasis—from whose outer verge a true and healthy vegetation shall advance in every direction over the exhausted soil."

"It is not improbable, also, that the graft will itself expand, or be drawn centrifugally by the contraction of the surrounding granulations and cicatrix, conversely, as the skin about the ulcer had before been stretched and drawn centripetally, by a similar action of the granulations and cicatrix situated within its free margin, so that after a time, it will cover more space, independent of any actual growth, than it did originally. The opposite of this happens usually in anaplasty, and would occur here, did the flap equal or exceed the wants of the parts to be supplied. The flap would contract, thicken, and project itself above the surface. But in old ulcers, it will generally be found impossible to furnish a direct supply of integument equal to the loss. A deficiency must probably still exist, and sufficient, it is believed, to determine in the transplanted skin a necessity of expansion."

We will conclude our extracts from this paper with the following—the author's—summary:

1st. "Ulcers accompanied with extensive loss of integument, do generally refuse to heal, whatever may be the health of the body or of the limb."

2d. "Anaplasty will sometimes succeed in accomplishing a permanent cure, and especially where the health of the body and the limb are perfect, and where, by inference, the refusal to heal is alone attributable to the extent of tegumentary loss."

3d. "The graft must be brought from a part quite remote; generally from an opposite limb, or from another person."

4th. "If smaller than the chasm which it is intended to fill, the graft will grow, or project from itself new skin to supply the deficiency."

5th. "It is not improbable that the graft will expand during the process of cicatrization at its margins, but especially for a time after the cicatrization is consummated."

6th. "In consequence of one or of both of these two latter circumstances, it will not be necessary to make the graft so large as the deficiency it is intended to supply."

PART FOURTH.

EDITORIAL AND MISCELLANY.

AMERICAN MEDICAL ASSOCIATION.—When an individual begins to get a little up in the world, he is regarded as a proper subject of censure or praise; and, in this *free* country, where every one claims the right to exercise his taste in giving to the public his particular views, we are favored occasionally with quite a diversity, even in relation to the most common matters that are introduced to public attention.

It is not, therefore, a matter of surprise, that the American Medical Association, after having been in existence but seven years, should now be arraigned before the public, on the charge of *inutility*. We have in our country, unfortunately, a greater versatility of taste than talent. There are some among us who are orthodox in all their movements; they regard the combined judgment of the fathers in the profession, as being good authority—a safe kind of precedent —something that does very well to light up the pathway, when all around is darkness. Such persons get the benefit of the world's experience, which, added to their own, leads to wisdom—to safe and practical results. Another class, and they are not few, have a taste to eschew things generally. They imagine there is more to be

made in tearing down, than in building up. It matters not how long an institution has stood, nor how well it has accomplished its purposes,—indeed, its popularity is prima facie evidence, with them, against it. The question is, has it any imperfections; is there any objection that can be urged against it? They never stop to inquire whether or not there is any such thing as the sophism of objections, or whether there is anything in the universe against which objections may not be urged. But, guided by the delusive supposition, that perfection is attainable in everything connected with human pursuits, they seem to enjoy themselves, and imagine that they are fulfilling a noble destiny, in mustering up all the "*cons*" possible, against everything presented for public confidence.

Constituted after this fashion, individuals will have their own way. Their actions are, in a measure, automatic—in obedience to impulses over which they have but an imperfect control. They pass through life, now and then doing things to some purpose, but, in the general, are characterized with so much that is sophistical, ridiculous, and false, that it would puzzle a savan in ethnology to tell what their "chief end" was, in the creation.

To such, the American Medical Association, and all other similar organizations, possess but few, if any, attractions, and, consequently, anything that may be said in its favor, will have but little weight.

With those who are disposed to consider things in a practical way, but little will be recognized in the organization of the institution to which we have alluded, or in its practical operations, to which any grave exceptions can be taken. Something of its kind was needed in our country, to get the profession together, in order to consult on the means necessary to give it concert of action, in things pertaining to its interest and usefulness. That such ends have been completely secured, no one, we presume, pretends to affirm; but that much has been done, and much more in a state of progress, all will admit, who have been at the trouble to consult the transactions of the Association. Forty thousand physicians, and two hundred and fifty professors, are not easily operated upon in the length of time the organization has been in existence, it matters not what the claims of things are, that are prescribed for their consideration. Scattered through some twenty degrees of latitude, and as many of longitude, their interests, although common in some respects, conflict in others. Besides, their plans of accomplishing the

same ends would, in all probability, be various and ineffectual. To adjust, therefore, and harmonize the actions of such a body of men, require, among other things, skill and time.

That much, as already suggested, has been done by the Association, notwithstanding all the disadvantages incident to new enterprises, is very obvious. The diseases of the different sections of our country, by the reports that have been made on Practical Medicine and Epidemics, have been much discussed, and are in a very fair way, according to the present arrangement of committees, to be well elaborated. Our surgery, too, has been subjected to very rigid scrutiny, and the result must be, that it will be benefited. Who is there that can read, for instance, the "*Summary*" of Gross on *Malignant Diseases*, made to the Association in 1853, without feeling that it is a contribution to the science, in the way of purifying it from useless operations. During the same year, Meigs made a report "*On Acute and Chronic Diseases of the Neck of the Uterus*," accompanied with plates, illustrating their appearances, which, for elaborateness, has no parallel in the records of midwifery. The same year, too, Burnet contributed his "*Prize Essay*," *on The Cell; its Physiology, and Pathology, and Philosphy*. The matter of this paper is made up almost entirely from the experiments of the author. The most of it we have read—some of it *studied*— and our comparison of it with similar efforts in other countries, establishes the conviction, that it will give the author, and the Association that appreciated it, character, wherever read. But our allusion to the transactions of 1853 was accidental. The other years of the existence of the institution, although, perhaps, not equally rich, nevertheless furnish many valuable papers on subjects in which every one must feel interested.

That for which the organization was mostly got up, is the elevation of the standard of medical education. Too low, entirely too low; this has been acknowledged to be, by every one who has put himself to the trouble to investigate it. Our country has increased so rapidly in population, that the demands for medical men have heretofore been such as would seem to justify the conferring of degrees upon individuals who gave promise of usefulness, rather than evidence at the time of qualification. Such a course, continued through a series of years, it is now thought, worked injurious results to the profession and the people. The profession it "*commonized*"—

robbed it of the dignity which attaches to learning; the people it spoiled, by letting them know, practically, that the possession of a diploma is no evidence of qualification to treat diseases.

The time is now come when it it is thought best to examine into the condition of our system of education, that such changes may be made upon it, as will comport with the general progress of other things of the age. Repeatedly this matter has been brought before the Association, analyzed and discussed, and, although we are yet in the transition stage, no one can look back without seeing that we are a good way from the point of departure. Progress has been made, and all of us feel it. It only needs, therefore, that the efforts which have been commenced in such good faith, and prosecuted so far with such results, should be continued.

We did not, however, sit down to write a defense of the American Medical Association. Such a labor would be unnecessary. As a practical available instrument, for the purposes for which it has been instituted, it commends itself to the confidence of all who have the capacity to appreciate things of its character.

Like all other things in which humanity has any hand, the Association has things about it that are susceptible of improvement. Among these, is the length of time usually devoted to its annual sessions. This, experience has proven to be too short. Time should be taken to have all the reports of committees and other papers read, at length, instead of abstracts of them, as has been, and is now the custom. This is necessary, as a guard to the character of the institution, and it would be the means of provoking those kinds of discussion that "increase knowledge." Coming together from all parts of a country, having such a diversity of topographical conditions, geological peculiarities, and climative influences, the members should have the occasion furnished them, of making a complete interchange of opinions, on all subjects of interest. Profit, socially and professionally, would be the result.

Objections have developed themselves in several quarters, with reference to the "*little frolicking*," that has attained at the annual meetings. A *soiree*, as a Frenchman would call it, has now and then been given, by resident physicians, and it has also been the custom to have an entertainment at one of the hotels, as a kind of public demonstration of the good feeling of the profession of the place. Now, it is objected that such things take up time, that might be employed to more advantage. Well, they do take up

time, but, as far as our acquaintance extends, it has generally been the time that is necessary for relaxation. The brain can't always work, no more than the stomach. It needs rest, relaxation, and what more appropriate than a social party, after the day's work is over, where all can meet together and have "a flow of soul?" For ourselves, we have no desire to see these customs, having their origin in the nature of things, abolished. They are as necessary to the institution, as social qualities are to an individual. *Esto perpetua.*

APHORISM OF HIPPOCRATES.

"Vita brevis, ars longa, occasio præceps, experientia fallax, judicium difficile."—Life is short, art long, occasion brief, experience fallacious, judgment difficult.

Such is the language of Hippocrates, the Father of Medicine, in his Aphorism No. 1. Uttered nearly four hundred years before the Christian Era, it comes down to us, not only clothed with the authority of a great name, but, what is still more, containing truths that are as imperishable as the author's name in the commonwealth of medical science. Each sentence in the Aphorism embodies enough of truth for a volume. We have no time to even comment upon any of them, much less all. The last, "*Judgment is difficult,*" we shall, however, take to serve as the basis for one or two remarks.

In the practice of medicine nothing is perhaps more frequently or more painfully realized than the truth of the remark, "Judgment is difficult." A body composed of some twenty or more *inorganic* elements, and some ten or twelve *organic*, arranged together in the forms of cells of the most delicate structure, tissues of the most complicated character, and organs of greatly diversified functions, all of which being under the influence of, and subject to, the play of the forces known as those of gravitation, cohesion, chemical attraction, and these again modified and controlled by that mysterious one known as the "*force of vitality,*" must give rise, whether in health or disease, to phenomena that, to the individual whose mission it is to repair, make "judgment difficult." Into this complicated mass of matter, often, an invisible, intangible, imponderable, inappreciable agent is introduced, which disturbs the harmonious and delicate relations, to the presence of which we apply the term *health.*

What now more difficult than to understand a derangement in matter thus complicated? If our vocation was merely that of an artist, it might do when something gets wrong to say, with the mechanic, that a "screw is somewhere loose," or "that a wedge has dropped out of its place." This, however, might not answer the purpose, even taken in a figurative sense. One of the little cells floating in the life-current has likely come to a place where it has been accustomed to pass, and has been denied admittance—has had to tarry, to lay over for a few days; or perhaps it has met the insidious enemy at a point where it was unexpected, and been robbed of some of its organic or inorganic elements. Again, perhaps, there has been "*a solution of continuity*" in some of the fibres of the tissues in the deep-seated parts of the body. Or, perhaps the foreign agent has come in contact with an organ, imparting to it unnatural activity, or what is just as likely, it has disarmed the organ of the ability to act at all. Now how is all this—and this is but a meager specimen—to be ciphered out? Certainly in attempting it, we are reminded of the saying of the distinguished personage to whom we have alluded—"Judgment is difficult."

Because we are unable always to be perfect in making out the exact character of the derangement, and, as a consequence, are unable to apply the proper remedy, we are upbraided often with the exclamation: "Oh, the glorious uncertainty of medical science!" "Doctors can do nothing more than divert the attention of the patient, while nature cures the disease," etc., etc. But few stop to think of the difficulties we have to encounter, in many cases, and the impenetrable mysteries that surround others. Our profession is to attempt the cure; and, although we may succeed ninety and nine times in the one hundred, still a failure in the other case is often a sufficient cause of reproach! "Why not cure all?" is the unreasonable inquiry. It would not be a sufficient offset to such demands to say that the moralist cannot cure all disposed to be vicious and corrupt; or that the lawyer cannot gain all his cases in court; or that the mechanic cannot mend all the broken machines; or that the chemist cannot analyze all the substances supposed to be compound; or that the astronomer cannot always predict the appearance of the comet; or that the geologist cannot come within a thousand years of the age of the world; or that the mathematician does not yet fully understand the capacity of the nine digits; or that the philologist is in the infancy of his knowledge concerning the power of letters; or that, in short, we are yet but upon the threshold

of all science, imperfect in all our efforts, it matters little what is up for investigation—such replies, we repeat, would in no way extenuate, in the estimation of the many, our imagined imperfections. Such being the case, what course is left for us to pursue? Are we to sit down and pare our finger-nails, in order to kill time, mourning over the want in the public mind of qualities it ought to posses, or make renewed efforts to confer a greater degree of certainty on every thing connected with our vocation? Are we to sit down and abandon the interests of our profession to the results of chance, because preachers, lawyers, poets, etc., etc., are found mustering with the quacks and charlatans of the day? The profession, we think, would universally give to such inquiries a negative response. In looking over the record, we find that we have made progress in every age, and in none more than the present. The truth is, however, that we have in charge the most difficult science, or, rather, series of sciences, with which our race has had any thing to do; and this fact, if properly appreciated by the great mass of our profession, would work out salutary results. It would stimulate to increased exertion. There is scarcely an individual but what might double the amount of labor he is performing, to make himself and others acquainted with the fields yet unexplored. This applies eminently to the young men scattered over the country, many of whom are in regions that abound in facts, which, if carefully collected and arranged, would perhaps untie a knot that has bothered all the men in the profession from Hippocrates to the present day. Indeed, there is no locality where disease occurs, but what contains much that would be useful, if rightly observed and recorded. The chemists are at work in the laboratory, and they are making developments that give increased certainty to our science; the pathological anatomists are at their posts, examining the tracks of disease on the organism, and why should not medical men, engaged in the practical parts of the profession, be equally industrious in their observations? The departments of the last are Etiology and Therapeutics—subjects in much need of investigation. If, therefore, all would labor, the time may yet come when we would not feel so pungently the force and truth of the sentence, "judgment is difficult."

In conclusion, we say to the readers of the Journal, write out your observations of interesting cases, epidemics, etc., and forward to us for publication.

Case of Rheumatism.—I was called (July 12th) to see T. B——, æt. 23 years, of lymphatic temperament. resides in Wyaconda tp., Clark county. Learned that he had been subject to frequent attacks of rheumatism in his feet and ankles for some six years, which at times became so severe as to render his lower extremities almost useless.

During the latter part of last fall rheumatic symptoms began to develop themselves in other parts of the body. His shoulders, neck, elbows and wrists fell victims to its strong hold. Finally it developed itself in his back, hips and knees. It gradually grew worse, and about the middle of January he was compelled to take his bed, which he was still occupying when I saw him.

Found him greatly emaciated. Feet and legs anasarcous. Pain and soreness has left his neck and shoulders, and appeared to be permanently located in his elbows, wrists, back, and lower extremities. Subject to profuse acid sweats. Sleeps but little at night, and is unable to turn himself in bed: the least motion of his body causing the most excruciating pain. Finally, found him entirely helpless, requiring more nursing than a new born infant.

Treatment.—Applied Electro-Galvanic Battery; combined equal parts of Vinum Colchici and Am. Tinct. Guiac., order half a teaspoonful of this to be given ter die; the parts affected to be bathed with a liniment composed of Ol. Organum, Olive Oil, Turpentine, Tinct. Guiac, Tinct. Camphor, and Aqua Ammo. The body to be sponged once a day with Hydro-chloric Acid, diluted to the strength of weak vinegar. Ordered gr. 10 Pul. Dover's to be given at night.

July 16th. Found swelling of feet and legs somewhat subsided; rests better at night; sweats also diminished. Applied bathing and ordered the other remedies to be used as above directed.

July 19th. Patient better; swelling greatly subsided; sweats but little; pain and soreness of joints also diminished; rests much better at night; can turn himself in bed.

July 24th. Still rapidly improving; swelling almost gone; pains and soreness greatly relieved; sleeps well at night; can get out of bed without assistance; Discontinued use of Dover's Powders.

July 31st. Patient doing well; pains and soreness has almost left his joints. From this time he convalesced steadily and rapidly, and is now (Aug. 24th) able to walk about and go on his way rejoicing. I would further add that this young man had been treated by seve-

ral physicians, but without the benefit. I ascribe his rapid recovery to the effects of the Guiac and Colchicum.

Waterloo, Mo. C. CHAPMAN.

STARLING MEDICAL COLLEGE.—This Institution commenced its session on the 18th ultimo, and will continue its operations for five months.

The present faculty expect to spare no pains in trying to place this school, so far as every thing relating to a medical education is concerned, among the best in the nation. With material for clinical instruction amply sufficient; with subjects and facilities for the prosecution of anatomical studies in abundance; with a college building which for elegance and the purposes designed, is not excelled in the world; with a Faculty united, full of zeal, and bound to succeed, the results, to those who adopt this school as their *Alma Mater*, must be eminently satisfactory.

RECEIPTS.—We commence in this No. of the Journal to publish receipts. Tnis seems necessary in order to satisfy subscribers that their remittances have come to hand, and it will dispense with the labor of doing it by letter, as has been hitherto the custom, to some extent, with the former conductors of the Journal.

The following are the receipts not otherwise acknowledged since our last issue:

Dr. C. Olds, $5; J. N. Lindley, $2; J. P. Henderson, $2; J. L. Beebout, $2; A. Plumbley, $2; C. H. Spahr, $2; A. E. Bell, $2; J. W. Scott, $2; J. Ware, $2; J. McCallen, $2; R. R. McElvaine, $1,25; J. W. Forshee, $2; W. A. Johns, $2; V. D. Brownell, $2; J. A. Potts, $2; Jared Fuller, $2; Park Bremer, $4; R. C. Bowdish, $4; J. R. Conner, $2; S. A. Morton, $2; W. T. Sharp, $2; C. T. McKenley, $2; Pickering, $2,30.

BULLOCK & CRENSHAW'S CATALOGUE.—We call attention to the Catalogue of Drugs and Medicinal Wares, by Bullock & Crenshaw, N. E. Cor. Arch and Sixth Sts., Philadelphia. See advertisement.

More Subscribers.—If each one of the patrons of the Journal would take a little extra interest in its welfare, a pretty considerable addition to our subscription list might be easily made, and we imagine all parties benefited. The design is to spread information, and, of course, the greater the theater, the more successfully this can be accomplished. We hope, therefore, our friends will find it convenient to use their influence in obtaining for us some new subscribers; the more light, the better for us all. Nothing that we can do shall be wanting, to make the Journal the vehicle of everything that is of utility in medicines and diseases.

OBITUARY.

Died, at his residence in Moscow, Clermont county, O., on the 7th of August, of cholera, John H. Moore, M. D. Aged 33 years.

The deceased was a graduate of Starling Medical College, and was never known to shrink from the dangers and responsibilities of his chosen profession. He had been, for some days previous to his decease, in almost constant attendance on cholera cases—himself unwell at the time, with disarrangement of the bowels, and when entreated by friends to not risk his own life, his reply was characteristic of the man: "My services are needed, my promises given, and when I die, I wish to die at my post!" He died the death of a Christian—resigned to God's will, and deeply lamented, as a relative, friend, and physician, by the community in which he dwelt. He has passed from among us, but we bless God for the assurance that "this, our brother, is not dead, but sleepeth—that he will rise again." A. C. M.

Death of Dr. John Steele.—This gentleman died at his residence in Dayton, on the 25th ult., after a protracted illness. With Dr. Steele we were not much personally acquainted. We have known him by reputation for a number of years. He was a graduate of the the University of Penn, and was a pupil of the institution during the time that Physic, Rush, and Wistar were connected with it. Possessed of a good education, and a good class of feelings, he did much to give character to the medical profession in his locality, and was generally esteemed by those who best knew him. We hope some one intimately acquainted with him, will furnish us with a biographical notice, for he deserves it.

Professor Sandford B. Hunt.—We are much gratified to learn that this gentleman has been elected to the chair of Anatomy in the Medical Department of the University of Buffalo, rendered vacant by the resignation of Professor Moore, who is about to remove from this city, and take the chair of Surgery in Starling Medical College. To the members of the profession Dr. Hunt is widely and favorably known by his writings in the Buffalo Medical Journal, of which he was one of its two editors. He is also one of the contributors to Putnam's Magazine, and the frequency with which his articles are taken from that periodical and published in the various journals, evinces the estimation in which his talents are held by the reading public.—*Buffalo News.*

Illustrated Catalogue.—This is a catalogue of Medical, Surgical and Scientific publications of the extensive publishing house of Blanchard & Lea. It can be had of all Booksellers throughout the United States and Canada. Physicians and Merchants wishing to order books will find this Catalogue a very useful reference.

Prize Essay.—We publish this paper of Dr. Wright's, because it is one of practical utility—will well pay the perusal of those who have any thing to do with Obstetric Practice.

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Columbus, October 25, 1854.

STARLING HALL

EMBRACES THE CENTRAL PORTION AND WEST WING of the edifice represented in the opposite engraving, and was originally designed by its founder, the late LYNE STARLING, Esq., for hospital purposes.

The building has been constructed and furnished with special reference to the comfort and convenience of its inmates, and is now open for the treatment of persons afflicted with any and every variety of *chronic diseases*, susceptible of cure or relief, irrespective of age or sex.

SURGERY.—In the department of Surgery, the ablest counsel, and most competent skill that can be procured, will be made available in every critical and important case.

DISEASES OF FEMALES.—A fine suit of private apartments has been supplied with baths of various kinds, and appropriated to the special accommodation of females who resort to this Institution for the treatment of diseases peculiar to their sex.

EYE AND EAR INFIRMARY.—Apartments have been comfortably and neatly furnished for the care and treatment, medical and surgical, of persons afflicted with diseases of the Eye and Ear.

Every department is abundantly supplied with water for bathing, —the cold, warm and tepid, the shower, sitz and douche baths, will always be in readiness for those who need their application.

MRS. LUCY C. PATTERSON will bestow her kind attentions as Matron of this Institution.

Starling Hall will be under the immediate medical and sanitary direction of R. J. PATTERSON, M. D., who will reside in the building and devote all needed time to the care and treatment of the inmates. F. CARTER, M. D., Professor of Obstetrics and Diseases of Women, and S. M. SMITH, M. D., Professor of Theory and Practice of Medicine, will attend as Consulting Physicians.

Physicians, as well as those afflicted, are invited to call and examine the Institution,—its fixtures, and our facilities for the treatment of disease.

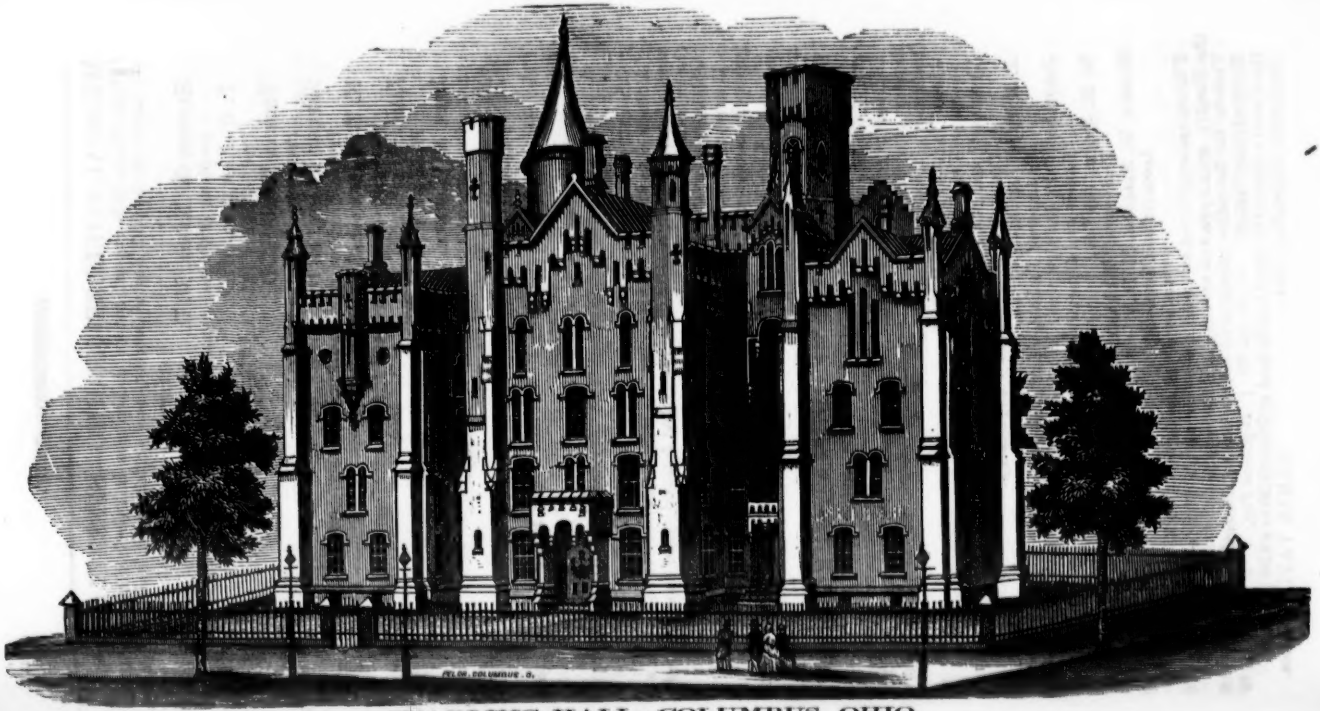
All letters addressed to the undersigned, will receive prompt attention.

TERMS—For board, washing, furnished apartments, fuel, lights, nursing, and treatment, the charges will range from $6 to $10 per week.

For Surgical operations, a separate charge will be made.

R. J. PATTERSON.

STARLING HALL, Columbus, O, Aug. 17, 1854.



STARLING HALL--COLUMBUS, OHIO.

MEDICAL COLLEGE OF OHIO—SESSION OF 1854-'5.

THE Thirty-fifth annual course of Lectures in this Institution will commence on the 30th day of October, and continue until the last of February.

FACULTY.

SAMUEL G. ARMOR, M. D.,
Professor of Pathology and the Practice of Medicine.
T. O. EDWARDS, M. D.,
Prof. of Materia Medica, Therapeutics, and Medical Jurisprudence.
THOMAS WOOD, M. D.,
Professor of Anatomy.
ASBURY EVANS, M. D.,
Prof. of the Principles and Practice of Surgery and Clinical Surgery.
N. T. MARSHALL, M. D.,
Professor of Obstetrics, and Diseases of Women and Children.
JAMES GRAHAM, M. D.,
Professor of Physiology and Clinical Medicine.
JOHN A. WARDER, M. D.,
Professor of Chemistry and Toxicology.
M. T. CAREY, M. D.,
Demonstrator of Anatomy.

Fee for the whole course, $92; Matriculation, $5; Hospital, $5; Graduation, $25; Demonstrator's Ticket, $8.

Board, $2,50 to $3 per week.

A preliminary course, free to all students, will be delivered during the month of October.

Clinical instruction is given twice a week at the Commercial Hospital.

A Medical and Surgical *Clinique* has also been established in connection with the College, at which cases will be prescribed for, and operations performed in the presence of the class.

Students may rely on an abundant and *prompt* supply of *material*.

Letters addressed to the Dean, or any member of the Faculty, will be promptly answered.

T. O. EDWARDS, M. D., *Dean of the Faculty.*

THOS. WOOD, M. D., *Registrar.*

OHIO COLLEGE OF DENTAL SURGERY.

FOURTH ANNUAL ANNOUNCEMENT.

THE regular course of Lectures in this Institution commences on the first Monday of November, and closes on Wednesday succeeding the third Monday of February. The new College edifice will be completed by 1st of October.

FACULTY.

JAMES TAYLOR, M. D., D. D. S.,
Professor of Principles and Practice of Dental Surgery.
THOMAS WOOD, M. D.,
Professor of Anatomy and Physiology.
J. B. SMITH, M. D.,
Professor of Pathology and Therapeutics.
JONATHAN TAFT, D. D. S.,
Professor of Operative Dentistry.
H. R. SMITH, D. D. S.,
Professor of Mechanical Dentistry.
GEORGE M. KELLOGG, M. D.,
Lecturer on Chemistry.

TERMS OF ADMISSION:

Tickets are considered as cash; and when not paid for in advance, a note to the Faculty, with approved security, will be required.

Tickets for the entire course, and admissions to dissections, - $100 00
Matriculation Ticket, - - $5 00 | Diploma Fee, - - 25 00

Good and respectable board can be had at from $2,50 to $3,50 per week.

Cincinnati, September, 1854. JAMES TAYLOR, *Dean.*

MEDICAL DEPARTMENT
OF
TRANSYLVANIA UNIVERSITY.

THE Faculty having determined to resume the WINTER SESSIONS of this School, the next course, (the 37th,) will be commenced on the first Monday in November next, and continue four months.

Preliminary Lectures will be given during the month of October.

A College Clinic has been established by the Faculty, in which many Surgical Operations and cases of disease are exhibited to the class.

Fee for the full course, $70; to those who have attended two full courses in other Colleges, $45. Matriculation and Library Ticket, $5; Graduation Fee, $25; Demonstrator's Ticket, $10; all payable in ADVANCE.

Boarding and Lodging, $2 50 to $3 50 per week.

FACULTY OF MEDICINE.

BENJAMIN W. DUDLEY, M. D., Emeritus Professor of Surgery.
ROBERT PETER, M. D., Professor of Chemistry and Pharmacy.
JAMES M. BUSH, M. D., Professor of Anatomy.
WILLIAM S. CHIPLEY, M. D., Professor of the Theory and Practice of Medicine.
JOHN R. ALLEN, M. D., Professor of Materia Medica and Therapeutics.
SAMUEL M. LETCHER, M. D., Professor of Obstetrics and Diseases of Women and Children.
HENRY M. SKILLMAN, M. D., Professor of General and Pathological Anatomy and Physiology.
ETHELBERT L. DUDLEY, M. D., Professor of the Principles and Practice of Surgery.
JAMES M. BRUCE, M. D., Demonstrator of Anatomy.

ROBERT PETER,
LEXINGTON, Ky., Sept., 1854. Dean of Med. Fac. T. U.

THE ANNUAL COURSE OF LECTURES
IN THE
CLEVELAND MEDICAL COLLEGE
WILL COMMENCE ON
WEDNESDAY, THE EIGHTEENTH DAY OF OCTOBER,
AND CONTINUE EIGHTEEN WEEKS.

THE BOARD OF INSTRUCTION remains the same as during previous Lecture Terms, and comprises the following gentlemen:

JOHN DELAMATER, M. D., Professor of General Pathology, Midwifery and Diseases of Women and Children.
JARED P. KIRTLAND, M. D., Professor of Physical Diagnosis and Theory and Practice of Medicine.
HORACE A. ACKLEY, M. D., Professor of Surgery.
J. LANG CASSELS, M. D., Professor of Materia Medica, Pharmacy and Botany.
SAMUEL St. JOHN, M. D., Professor of Chemistry and Medical Jurisprudence.
JACOB J. DELAMATER, M. D., Professor of Anatomy and Physiology.
PROCTOR THAYER, M. D., Demonstrator of Anatomy.

The fee for entire course of Lectures is $60; Matriculation $5; Graduation, $20.

When desired, a promissory note, payable in twelve months, for $70, and signed jointly with some person of responsibility, (the responsibility of the joint signer to be certified by a Justice of the Peace, and a Judge of the court of the county in which he resides,) will be accepted in place of the money at the time.

JOHN DELAMATER, Dean.

Cleveland Medical College, Sept. 1, 1854.

MEDICAL DEPARTMENT
OF
IOWA UNIVERSITY,
KEOKUK, IOWA.

SESSION 1854–'55.

FACULTY OF MEDICINE.

D. L. M'GUGIN, M. D., Professor of Physiology, Pathology and Microscopy.

FREEMAN KNOWLES, M. D., Professor of Theory and Practice of Medicine.

J. C. HUGHES, M. D., Professor of Surgery and Dean of the Faculty.

J. E. SANBORN, M. D., Professor of Chemistry and Materia Medica.

E. R. FORD, M. D., Professor of Obstetrics and Diseases of Women and Children.

E. A. ARNOLD, M. D. Professor of Anatomy.

JESSE BOWEN, M. D., Lecturer on Medical Jurisprudence.

KIRTLY RYLAND, M. D., Demonstrator of Anatomy.

STEPHEN MYERS, Janitor.

Session commences on Wednesday, November 1st, 1854.

Fees for the course, $60; Matriculation, $3; Dissecting Ticket, $5.

The holder of a scholarship issued by order of the Trustees, admitting him to the whole course of one session, upon payment of $15. Graduating Fee, $30.

All letters of inquiry should be addressed to

J. C. HUGHES, M. D.,
Dean of the Faculty.

Sept., 1854.

UNIVERSITY OF MICHIGAN MEDICAL COLLEGE.

FIFTH SESSION, 1854–'55.

THE Annual Course of Lectures will be commenced on the first day of October, 1854, and continue six months.

The Annual Commencement for conferring degrees will be held on the last Thursday of March.

FACULTY.

PRESIDENT, SILAS H. DOUGLASS, M. D.

SECRETARY, ABRAM SAGER, M. D.

ZINA PITCHER, M. D., Emeritus Professor of the Institutes of Medicine and Obstetrics.

ABRAM SAGER, M. D., Professor of Obstetrics and Physiology.

SILAS H. DOUGLASS, M. D., Professor of Chemistry, Pharmacy and Medical Jurisprudence.

MOSES GUNN, M. D., Professor of Surgery.

SAMUEL DENTON, M. D., Professor of Theory and Practice of Medicine and Pathology.

A. B. PALMER, M. D., Professor of Materia Medica, and Diseases of Women and Children.

CORYDON L. FORD, M. D., Professor of Anatomy.

EDMUND ANDREWS, M. D., Professor of Comparative Anatomy, and Demonstrator of Human Anatomy.

Expenses: Instruction gratuitous; Matriculation Fee $10, payable but once, and applied to the benefit of Library and means of illustration.

No Graduation Fee, but a charge of $2 for the purpose of the parchment.

A Fee of $3 will be assessed for the advantage of the Anatomical Laboratory. For further information see Catalogue.

ABRAHAM SAGER, M. D.,
Secretary of Faculty.

ANN ARBOR, Mich., Sept., 1854.

UNIVERSITY OF NASHVILLE,

MEDICAL DEPARTMENT.

The Fourth Annual Course of Lectures in this Institution will commence on Monday the 30th of October next, and continue till the first of the ensuing March.

ROBERT M. PORTER, M. D., General and Special Anatomy.
J. BERRIEN LINDSLEY, M. D., Chemistry and Pharmacy.
C. K. WINSTON, M. D., Materia Medica and Medical Jurisprudence.
A. H. BUCHANAN, M. D., Surgical and Pathological Anatomy.
THOMAS K. JENNINGS, M. D., Institutes of Medicine and Clinical Medicine.
W. K. BOWLING, M. D., Theory and Practice of Medicine.
JOHN M. WATSON, M. D., Obstetrics and the Diseases of Women and Children.
PAUL F. EVE, M. D., Principles and Practice of Surgery.

WILLIAM T. BRIGGS, M. D., Demonstrator of Anatomy.

The Anatomical rooms will be opened for Students on the first of October.

A full *Preliminary course* of Lectures, free to all Students, will be given by the Professors, commencing also on the first Monday of October.

A Clinique has been established, in connection with the University, at which operations are performed and cases prescribed for and lectured upon in presence of the Class.

Arrangements have been made to accommodate all patients requiring surgical operations.

Amount of Fees for Lectures in the University is $105. Matriculating Fee, (paid once only,) $5; Practical Anatomy, $10; Graduating Fee $25.

Excellent board can be obtained for $3 per week. Further information can be obtained by addressing the Dean.

J. B. LINDSLEY, M. D., Dean of the Faculty,
Nashville, Tenn., July, 1854. No. 33, College street.

MIAMI MEDICAL COLLEGE,

CINCINNATI.

SESSION OF 1854–5.

The Third Annual Course of Lectures in this Institution will commence on Monday, the 30th of October, and continue until the 1st of February.

FACULTY.

R. D. MUSSEY, M. D., Professor of Descriptive and Operative Surgery.
J. P. JUDKINS, M. D., Professor of Surgical Anatomy and Surgical Pathology.
CHAS. L. AVERY, M. D., Professor of Anatomy and Clinical Medicine.
JOHN DAVIS, M. D., Adjunct Professor of Anatomy.
JOHN F. WHITE, M. D., Professor of Theory and Practice of Medicine.
GEO. MENDENHALL, M. D., Professor of Obstetrics and the Diseases of Women and Children.
JOHN A. MURPHY, M. D., Professor of Materia Medica and Therapeutics and Medical Jurisprudence.
C. G. COMEGYS, M. D., Professor of the Institutes of Medicine.
H. E. FOOTE, M. D., Professor of Chemistry.
J. T. WEBB, M. D., Demonstrator of Anatomy.

Professors JUDKINS and MURPHY, who have been in Europe for the past year, will return in September next.

The Dissecting rooms will be opened on the first of October, under the care

of the Professors of Anatomy and the Demonstrator. An ample supply of *material* can be relied upon.

Clinical Lectures will be delivered regularly by the Professors of Clinical Medicine and Surgery, at the St. Johns Hospital, and at the College.

The City Dispensary will furnish obstetrical and other cases to advanced members of the Class.

Preliminary Lectures will be delivered during the months of September and October, without extra charge.

The College rooms are ample and convenient.

FEES.—For the course, $92; Matriculation, (paid once only,) $5; Dissecting ticket, $8; Hospital and College Clinical ticket, $5; Diploma, $25.

Good board can be procured from $2 50 to $3 per week.

GEO. MENDENHALL, M. D., Dean, 197 Fourth street.

September, 1854.

STARLING MEDICAL COLLEGE.

The regular session of this Institution will commence on Wednesday the 18th of October, 1854, and continue 20 weeks.

FACULTY.

S. M. SMITH, M. D.
Professor of Theory and Practice, and Dean of the Faculty.

FRANCIS CARTER, M. D.
Professor of Obstetrics and Diseases of women and children.

E. M. MOORE, M. D.
Professor of Surgery.

JOHN DAWSON, M. D.
Professor of General and Special Anatomy and Physiology.

J. W. HAMILTON, M. D.
Professor of Mat. Medica, Therapeutics, and Med. Jurisprudence.

THEO. G. WORMLEY, M. D.
Professor of Chemistry.

W. L. MCMILLEN, M. D.
Demonstrator of Anatomy.

FEES.

LECTURES.....	$60	Dissecting Ticket.....	$5
Matriculation.....	3	Graduation.....	20

Good Boarding may be obtained for $1 75 to $2 50 per week.

Letters asking for information, answered promptly, if addressed to any member of the Faculty, or to

S. M. SMITH, DEAN.

Columbus, July, 1854.

NEW YORK MEDICAL COLLEGE.

THE next Annual Course of Lectures in the New York Medical College will commence on Wednesday, the 18th day of October, 1854, and continue until the first of March, 1855.

HORACE GREEN, M. D., President of the Faculty, and Professor of the Theory and Practice of Medicine.

EDWIN HAMILTON DAVIS, M. D., Professor of Materia Medica and Therapeutics.

B. FORDYCE BARKER, M. D., Professor of Midwifery and Diseases of Women and Children.

R. OGDEN DOREMUS, M. D., Professor of Chemistry.

J. M. CARNOCHAN, M. D., Professor of the Principles and Operations of Surgery.

EDMUND R. PEASLEE, M. D., Professor of General, Descriptive and Microscopical Anatomy.

EDWARD H. PARKER, M. D., Professor of Physiology and Pathology.

JOEL PARKER, LL. D., Professor of Medical Jurisprudence

D. S. CONANT, M. D., Demonstrator of Anatomy.

A preliminary course of Lectures will commence on Monday, the 2d day of October, which will be independent of the Regular Course, and will be free to all Medical Students.

The Dissecting Rooms will be open for Classes on the 1st of October.

This College has just received from Europe a most valuable and extensive museum, fully representing external and internal pathology, together with a whole series of microscopic models.

The advantages which New York offers for clinical study far surpass those of any other city. The students of this college can have access to the New York Hospital, Bellevue Hospital, and Emigrant's Hospital, as well as to the Eye and Ear Infirmary, and the various Dispensaries of the city. A Surgical, a Medical, and an Obstetrical Clinique will be held weekly by the Professors of these departments. Obstetrical cases and subjects for dissection are abundantly furnished for the students.

FEES:

Matriculation $5 ; Demonstrator's Ticket $5; The full course $105 ; For the final examination $30.

Students upon arriving in the city should at once call upon the Janitor at the College, who will furnish them with a list of respectable boarding houses.

R. OGDEN DOREMUS,
Dean of the Faculty.

Sept. 1854—3m.

R. P. LITTLE, M. D.,
APOTHECARY AND DRUGGIST,
COLUMBUS, OHIO.

Successor to Drs. Denig & Harry.

WILL wholesale and retail Medicines, Chemicals, Drugs, Surgical and Dental Instruments, Paints, &c., &c., at exceedingly low prices. His assortment includes every article usually kept by Druggists ; as he is daily receiving his stock, he can present many inducements to physicians and druggists in this and adjoining towns, if they will only favor him with a call.

Having enjoyed many years' experience in compounding medicine, he will promptly and very carefully fill Physicians' prescriptions, and to this branch of business he will give special attention, as he regards it of the highest importance. None but the best medicines will be used for this purpose, and he will strictly observe chemical principles in their combination. As he purposes devoting his time entirely to the occupation of a druggist, he solicits the patronage of medical men and the public generally. [Jan. 1853.

UNIVERSITY OF LOUISVILLE,
MEDICAL DEPARTMENT.

The Eighteenth Annual Course of Lectures in this Department, will commence on the 30th of October next, and terminate on the last of February, under the following arrangement:

BENJAMIN R. PALMER, M. D., Professor of Descriptive and Surgical Anatomy.

LUNSFORD P. YANDELL, M. D., Professor of Physiology and Pathological Anatomy.

SAMUEL D. GROSS, M. D., Professor of the Principles and Practice of Surgery.

HENRY MILLER, M. D., Professor of Obstetric Medicine.

LEWIS ROGERS, M. D., Professor of Materia Medica and Therapeutics.

J. LAWRENCE SMITH, M. D., Professor of Medical Chemistry and Toxicology.

T. G. RICHARDSON, M. D., Demonstrator of Anatomy and Dissector Pathological Anatomy.

The fee for admittance to the Lectures of each Professor, is $15, ($105 in all,) payable invariably in advance. Matriculation and Library fee together, $5. Graduation fee, $25. Practical Anatomy and Dissection, $10 — ticket to be taken at least once before graduation. Rooms open from 1st October.

A preliminary course of Lectures will be delivered, without additional charge, during the month of October.

Clinical instruction is given twice a week at the Louisville Marine Hospital. Ticket $5, to be taken once before graduation.

A Clinique has been established in connection with the University, at which cases are examined, prescribed for and lectured upon in presence of the Class.

Good boarding can be procured at $3 a week.

L. P. YANDELL, M. D., Dean of the Faculty.

June 14th, 1854.

SURGICAL INSTRUMENTS,
BY K. KLOTT.

OPPOSITE THE UNITED STATES HOTEL,

COLUMBUS, OHIO.

Mr. KLOTT, who has been for a long time in the employment of Geo. Tieman, of New York, has opened a new establishment for the manufacture and sale of all kinds of Surgical and Dental Instruments of the finest quality, which he proposes to sell on the most reasonable terms.

He keeps constantly on hand a great variety of instruments, which he invites physicians, surgeons and dentists to call and examine before purchasing elsewhere. He hopes, and is determined to furnish the western profession with as good a quality of instruments as can be found in our largest cities.

☞ Orders from abroad promptly attended to.

From an acquaintance with Mr. Klott, and an examination of his instruments, I feel fully justified, and indeed I take pleasure, in recommending them in the highest terms. I have had ample opportunities to test the instruments of many of the most celebrated manufacturers of the world, and I have no hesitation in saying that for beauty of finish and fineness of steel and temper, they are not excelled by any I have ever seen. They are equal to Tieman's or Schively's best.

R. L. HOWARD.

CATALOGUE

OF

DRUGS, PHARMACEUTICAL PREPARATIONS,

AND

MEDICINAL WARES,

OFFERED TO PHYSICIANS BY

BULLOCK & CRENSHAW,

(SUCCESSORS TO SMITH & HODGSON,)

DRUGGISTS AND MANUFACTURING CHEMISTS,

Northeast Corner of Arch and Sixth Streets,

PHILADELPHIA.

MAY 1, 1854.

PREFACE.

In issuing the present edition of their Catalogue, the Subscribers have extended the list of medicines to embrace all the new preparations of importance.

The list of apparatus has received many additions, and the forms of many of the important articles are illustrated by wood-cuts.

Our arrangements enable us to supply all the new preparations as they are presented to the notice of the Profession.

Connected with our establishment we have a laboratory in which our pharmaceutical preparations are made, under our own superintendence, and in strict accordance with the U. S. Pharmacopœia, and our powders are prepared from articles which have been carefully selected by ourselves.

In the list of medicinal wares will be found the prices of glass-stoppered bottles, which, by importing, we are enabled to sell at low rates. These bottles, both by their handsome appearance and greater convenience, are much more suitable for a Physician's office than the cork-stoppered bottles; and where there is not a special order to the contrary, such bottles will be used for putting up their articles, and will be charged at the prices named in the list.

The skeletons priced are from one of the first anatomical establishments in Paris, and will be found of a superior quality; they are so cleaned that the grease will not appear on them after keeping. The list of anatomical preparations, &c., annexed, will, it is hoped, enable Colleges, Professors, and others to supply themselves with such articles without the expense of sending a person to Europe specially for this purpose.

The Magneto-Electric machines, described at the close of the Catalogue, are the most approved instruments in use for applying electricity as a remedial agent. The instrument operates without acids, has received the sanction of the Professors in our Medical Schools, and practitioners of highest eminence.

We have published a catalogue of chemicals, pure reagents and chemical apparatus, illustrated by wood-cuts, which we will be happy to furnish upon application.

All orders will be executed with care and despatch, and packed so as to carry safely to any part of the country, we holding ourselves responsible for all breakage over 5 per cent. of the amount of the order; or for 2 per cent. we will insure against all breakage. The expense of sending goods to the most distant part of the country, by sea or land, with the present low prices of transportation, is very trifling.

Being also the manufacturers of Osborne's superfine American Water Colors, the reputation of which has been long established, we will take pleasure in forwarding price currents to all who may desire them.

BULLOCK & CRENSHAW,
Sixth and Arch Streets, Philadelphia.

May 1, 1854.

DRUGS AND MEDICINAL WARES

OFFERED TO

PHYSICIANS

BY BULLOCK AND CRENSHAW,

N. E. CORNER ARCH AND SIXTH STS., PHILADELPHIA.

ACETONE (pyroxilic spirit)	$2 00 per	lb.*
ACETUM, Opii	1 50	lb.
Scillæ	50	lb.
ACID: Acetic: No. 8	28	lb.
Arsenious, Pure	25	lb.
Arsenic:	25	oz.
Benzoic:	40	oz.
Citric:	2 00 Scarce	lb.
Gallic:	1 50	oz.
Muriatic: Med: Pure	12	lb.
Nitric: Med: Pure	25	lb.
Nitro-muriat:	25	lb.
Phosphoric: Glac:	50	oz.
" Dilut:	1 00	lb.
Prussic: U. S. P. in oz. Stop. Bot.	31	oz.
Pyroligneous	25	lb.
Sulphuric:	06	lb.
" Aromatic:	50	lb.
Oxalic:	50	lb.
Tannic:	31	oz.
Tartaric:	Scarce 75	lb.
ACONITINE	15	gr.
ALCOHOL: U. S. P:	62 to 75	gall.
Absolute	50	pint.
ALUM	08	lb.
ALOE, Capens:	25	lb.
" Pulv:	38	lb.
Socotrina	63	lb.
" Pulv:	75	lb.
AMMON: Carb:	30	lb.
Murias	25	lb.
AMMON: Nitras	1 00	lb.
Phosphas	1 50	lb.
ANNATTO	50	lb.
ANTIM: et Potass: Tart:	62	lb.
Sulph: Pulv:	20	lb.
" Kermes:	12	oz.

*The pounds and ounces referred to in this Catalogue are all avoirdupois; for convenience we have used the term dr. for the 1-8th of an avoirdupois ounce.

AQUA: Ammon: fff.	$0 20	per pt.
" Concent.	50	pint.
Destill:	06	pint.
Fortis	12	lb.
Rosæ	15	pint.
ARGENTI NITRAS, Cryst:	1 25	oz.
" " Fus:	1 25	oz.
" " Oxid:	2 00	oz.
ARSENICUM (pure sublimed)	25	oz.
" Iodid:	1 50	oz.
ARSENICI SOLUT: (Fowler's)	50	pint.
" " (Donovan's)	1 00	pint.
ASPARAGIN	1 00	dr.
ASSAFŒTIDA	38	lb.
ATROPIA	15	gr.
BACCÆ JUNIPERI	25	lb.
Pip: Nig: Pulv:	20	lb.
BALSAM: Canada	88	bottle.
Copaibæ	62	lb.
" Solid:	1 00	lb.
" Capsules	75, 1 50, 2 00	doz.
Peruv:	25	oz.
Sulphur:	1 00	lb.
Tolu:	1 25	lb.
BEBEERIN	50	dr.
Sulph:	38	dr.
BISMUTH: Subnit:	12	oz.
Valerian:	50	dr.
BLUE MASS: vid: Pil: Hydrarg:		
BRUCIA	50	dr.
Sulph:	50	dr.
BURGUNDY PITCH	16	lb.
CADMII Sulph:	1 50	oz.
CAFFEINE	1 00	dr.
CALCIS Chlorid:	10	lb.
Carb: Præcip: Eng:	38	lb.
" Præp:	08	lb.
CALCII Chlor: Pure	06	oz.
CALCIS PHOSPH: Præc:	50	lb.
CALOMEL vid: Hydrag: Chlor: Mit:		
CAMPHORA	50	lb
CANTHARIDES	(scarce)	
Pulv:	(scarce)	
CANTHARIDIN TISSUE (Brown's)	1 50	can.
Dressing Tissue "	75	can.
CAPSICI AFRIC: Pulv:	50	lb.
CARBO LIGNI, Pulv: (Willow)	25	lb.
CARRAGEEN	25	lb.
CARYOPHYLLUS	38	lb.
CASTOREUM RUSSIC:	1 25	oz.
CATECHU	25	lb.
Pulv:	38	lb.
CERA ALBA	60	lb.
CERATUM Cantharidis	1 50	lb.
Cetacei	50	lb.
Plumbi S'act	50	lb.

CERATUM Resinæ	$0	50 per	lb.
" Comp:		50	lb.
Sabinæ		50	lb.
Simplex.		50	lb.
Zinci Carb:		50	lb.
CETACEUM		56	lb.
CHIMAPHILA		25	lb.
CHINOIDINE		75	oz.
CHLOROFORM	1	50	lb.
CINCHONINE	1	25	oz.
CINCHON: Sulph:	1	25	oz.
COCCINELLA		12	oz.
CODEINE	3	00	dr.
COLOCYNTHUS	1	00	lb.
COLLODION, in 1 oz. Stop. Bot.	2	00	doz.
Cantharidal, in ½ oz. Stop. Bot.	2	00	doz.
COD-LIVER OIL, Vid: Ol: Jecoris:			
CONFECT: Rosæ		50	lb.
Opii		10	oz.
Sennæ		50 per	lb.
CONIA	2	00	dr.
CORTEX Aurantii		15	lb.
Angusturæ		30	lb.
Canellæ		20	lb.
" Pulv:		30	lb.
Cascarillæ		25	lb.
Cassiæ		50	lb.
" Pulv:		62	lb.
Cinchon: Flav:	1	75	lb.
" " Pulv:	2	00	lb.
" Rub:	1	50	lb.
" " Pulv:	1	75	lb.
Cinnam: (Ceylon)		12	oz.
Mezerei		25	lb.
Prun: Virg:		20	lb.
Punic: Gran: Fruct:		38	lb.
" " Rad:		50	lb.
Quassiæ Simarub:		75	lb.
Sasaf: Rad:		15	lb.
Ulmi		15	lb.
" Pulv: (Fine)		25	lb.
Ulmi, Pulv: (Coarse)		20	lb.
Winteræ Aromat:		75	lb.
Xanthoxyl:		38	lb.
CREASOTUM, in 1 oz. Stop. Bot.		38	oz.
CROCUS SATIVUS		62	oz.
CUBEBA	(scarce)	50	lb.
Pulv:	(scarce)	62	lb.
CHELTENHAM SALT	3	00	doz.
CUPRI SULPHAS		15	lb.
CUPRI DINIODID:		75	oz.
DELPHIA			
DIGITALINE		25	gr.
DOLICHOS PRURIENS (Cowhage)	1	00	oz.
ELATERIUM (Clutterbuck's)		88	dr.
ELIXIR OPII (McMunn's)	2	25	doz.

ELIXIR OPII (Crew's)	$2 00	per doz.
EMETINE	2 50	oz.
EMPLAST: Adhesiv:	38	lb.
Ammoniac:	75	lb.
" C. Hydrarg:	1 25	lb.
Assafœt:	1 25	lb.
Belladon:	1 50	lb.
Calefac:	75	lb.
Cantharid:	1 50	lb.
Gaban: Comp:	50	lb.
Hydrarg:	1 00	lb.
Logani	50	lb.
Myrrhæ	1 25	lb.
Opii	2 00	lb.
Plumbi	38	lb.
Resinæ	38	lb.
Roborans	38	lb.
Saponis	50	lb.
ERGOTA	1 25	lb.
Pulv:	1 50	lb.
ERGOTINE	65	dr.
ESS: MENTH: PIP:	75	pint.
ETHER Acetic	60	pint.
Chloric	50	pint.
Sulphuric	30	pint.
" Letheon	38	pint.
EXTRACT: Aconiti, Eng:	25	oz.
Anthemid:	12	oz.
Belladon:	25	oz.
Cannab: Ind: Eng:	3 00	oz.
Cinchon: Præcip: in oz. Pots	75	oz.
Cinchon: Fluid:	2 50	lb.
Colchici: Acet:	50	oz.
Coloc: Comp:	2 50	lb.
Coloc: Simp:	50	oz.
Conii, Eng:	12	oz.
Cotyledon: Umbilic:	1 00	oz.
Cubeb: Fluid:	31	oz.
Digital:	25	oz.
Diosmæ Fluid:	1 50	lb.
Dulcamaræ,	19	oz.
Glycyrrhizæ Calab:	30	lb.
" Pulv:	50	lb.
Gentianæ	50	lb.
Hellebor: Nig:	25	oz.
Hyoscyami, Eng:	25	oz.
Jalapæ Alc.	25	oz.
Jugland:	12	oz.
Krameriæ (by cold displacement),	20	oz.
Monesiæ	2 00	oz.
Nuc: Vom: Alc:	50	oz.
Opii Acet:	1 00	oz.
" Aquos:	1 00	oz.
Pareiræ Brav:	50	oz.
Polygalæ Senegæ	50	oz.
Quassiæ	50	oz.

EXTRACT: Rhei	$0 25	per oz.
" Fluid	2 00	lb.
Sabinæ	50	oz.
Sarsap: Alc:	38	oz.
" Fluid: Com:	6 00	doz.
Sennæ " "	1 50	lb.
Spigeliæ " "	1 50	lb.
Stramonii	25	oz.
Secale Cornut: (without oil)	50	oz.
Taraxaci, Eng:	12	oz.
Valerian Fluid:	1 50	lb.
" Solid: (Etherial)	50	oz.
FECULA MARANTA BERMUDA	50	lb.
FARINA Avenæ Beth:	10	lb.
Sem: Lini	12	lb.
FERRI Arsenias	75	oz.
Ammon: Chlor:	06	oz.
Bromid:	1 00	oz.
Carb: Præcip:	30	lb.
" Vallet's	75	lb.
Citras	20	oz.
Ferrocyanuret:	12	oz.
Iodid:	75	oz.
Lactas	38	oz.
Limatura	12	lb.
Oxid: Hydrat:	50	lb.
Oxid: Nig:	10	oz.
Pernit: Solut:	75	lb.
Phosphas	60	lb.
Et Magnes: Citras	38	oz.
Et Potass: Tart:	75	lb.
Et Quin: Citras	1 25	oz.
Et Potass: Tart: (in Scales)	20	oz.
Sesquichlor:	38	oz.
Sulphas Pur:	25	lb.
Tart: Ammon	20	oz.
Tannas	62	oz.
Valerianas	3 00	oz.
FERRUM subtillissim:	25	oz.
" per Hydrogen (Quevennes)	50	oz.
" " " " French,	1 00	oz.
FLORES ANTHEM:	50	lb.
Arnicæ	50	lb.
Lavand:	25	lb.
Rosæ Gallic:	1 50	lb.
FOLIA Aconiti, Eng:	1 00	lb.
Belladon: "	1 00	lb.
Conii "	1 00	lb.
Digitalis "	1 00	lb.
Digital: Ang: Pulv:	1 25	lb.
Diosmæ Crenat:	75	lb.
Hyoscyam: Eng:	1 00	lb.
Lobeliæ	50	lb.
Matico	12	oz.
Sabinæ, Eng:	1 00	lb.
" " Pulv:	1 25	lb.

FOLIA Sennæ Alex.	$0 38	per lb.
" " Pulv:	50	lb.
Uvæ Ursi	25	lb.
FUCUS HELMINTHOCORTON	75	lb.
GALLA ALEPPO	50	lb.
" Pulv:	65	lb.
GLYCERINE	15	oz.
GRANVILLE'S LOTION	50	pint.
GUM: Acac: No. 1.	80	lb.
" No. 2.	60	lb.
" Pulv:	75	lb.
Ammoniac:	50	lb.
Benzoin:	75	lb.
Elemi:	50	lb.
Galban: Cobat:	1 00	lb.
Gambogia	1 25	lb.
" Pulv:	1 50	lb.
Guaiacum	50	lb.
Myrrha Turc:	68	lb.
" Pulv:	88	lb.
*Scammon: (Virgin)	1 00	oz.
" " Pulv:	1 00	oz.
Tragacanth:	75	lb.
Styrax	62	lb.
GUTTA PERCHA		
HIERA PICRA	75	lb.
HOOPER'S PILLS	75	doz.
HORDEUM PERLAT:	12	lb.
HYDRARGYRUM	1 50	lb.
Ammon:	12	oz.
Chlor: Mit:	1 25	lb.
Chlor: Mit: Aug:	1 75	lb.
Bichlor: Corros:	12	oz.
Bicyanid:	50	oz.
Cum Creta	12	oz.
Iodid: Proto:	75	oz.
" Bin:	75	oz.
Nitras Per: (acid)	25	oz.
Oxid: Rub:	12	oz.
Phosphat:	75	oz.
ICHTHYOCOLLA Americana	1 00	lb.
Russic:	50	oz.
IODINUM (Resublimed in 1 oz. Stop. Bot.)	75	oz.
KINO	1 00	lb.
LACTUCARIUM	1 00	oz.
LAPIS DIVINIS	25	oz.
LICHEN Island:	15	lb.
LIGNUM Guaiaci Rasp:	12	lb.
Quass:	12	lb.
Santal: Rub:	12	lb.
LINTEUM	1 25	lb.
LIQ: Ammon: Acet:	25	lb.
Plumb: S: Acet:	50	pint.

* Aleppo Scammony has become so impure we do not price it. We had occasion to test a number of samples, and no one contained five per cent. of Virgin Scammony.

LIQ: Donovani	$1 00	per pint.
Ferri Ternitras	75	pint.
Opii Sedativ:	1 00	pint.
Potass:	25	pint.
" Arsen: (Fowler's)	50	pint.
Sodæ Chlorinata (Labarraque's),	38	pint.
LUNAR CAUSTIC, Vid: Argent: Nit:		
LUPULINA	20	oz.
LYCOPODIUM	1 00	lb.
MACIS	1 50	lb.
MAGNES: Calc: Opt: Ang:	75	lb
" " " in lb. bottles	1 00	lb.
Carb:	30	lb.
" Sm: Squares	56	lb.
Citras: (Effervescing solution)	2 25	doz.
*Husband's	4 00	doz.
Henry's	8 00	doz.
Sulphas	06	lb.
MANGANESII Carb:	38	oz.
Chlorid:	38	oz.
Iodid: (solut:)	25	oz.
Oxid: (black)	12	lb.
Oxid: (Red)	38	oz.
Phosph:	38	oz.
Sulph:	25	oz.
Tart:	25	oz.
MANNA, Small Flake	scarce.	
Large Flake	scarce.	
MANNITE	25	oz.
McMUNN'S ELIXIR	2 25	doz.
MECONIN		
MEDULLA Sassaf:	50	oz.
MEL ROSÆ	50	lb.
MONARDINE	50	dr
MORPHIA Pure Alkaloid	75	dr.
MORPHLÆ Acetas	4 00	oz.
Murias	4 00	oz.
Sulphas	4 00	oz.
Tannas	75	dr.
Valerianas	1 00	dr.
MOSCHUS		
MUCUNA (Cowhage)	1 00	oz.
MYRISTICA	1 50	lb.
NAPHTHA	2 00	lb.
NARCOTINA	75	dr.
NUCIS VOM: Pulv:	38	lb.
OLEUM Amygd: Amar:	1 25	oz.
" Dulc:	62	lb.
Anethi Fœniculi	20	oz.
Anisi	20	oz.
Aurantii Cort:	20	oz.
Bergamii	38	oz.
Cari	25	oz.

*Husband's magnesia has been long used by the Profession in this city, and is preferred to Henry's.

OLEUM	Cajuputi	$0 25	per oz.
	Camphoræ	25	oz.
	Caryophylli	25	oz.
	Cassiæ	31	oz.
	Chenopodii	38	oz.
	Copaibæ	12	oz.
	Croton: Tiglii	50	oz.
	Cubebæ	38	oz.
	Ergotæ	1 00	oz.
	Gualtheriæ	38	oz.
	Hedeomæ	20	oz.
	Jecoris Aselli (in pint bottles)	5 00	doz.
	Juniperi	75	lb.
	Lavandulæ	12	oz.
	Limonis	25	oz.
	Menthæ Piperitæ	38	oz.
	" Sativ:	25	oz.
	Monardæ	20	oz.
	Myristicæ Ess:	75	oz.
	Olivæ Opt:		doz.
	" Com:	25	pint.
	Origani	75	lb.
	Ol Pimentæ	1 00	oz.
	Piper: Nig:	1 00	lb.
	Pini Canadensis	75	lb.
	Ricini	25	lb.
	Rosmarini	75	lb.
	Sabinæ	12	oz.
	Sassafras	10	oz.
	Succini Rect	1 00	lb.
	Tanaceti	20	oz.
	Terebinthinæ	10	pint.
	Valerianæ	1 25	oz.
OPIUM	Turc: (variable)	5 00	lb.
	" Pulv:	50	oz.
	" Denarcot:	75	oz.
OPODELDOC,	Liquid	1 00	doz.
	Solid	1 00	doz.
OX GALL,	Inspissated	31	oz.
PAPAV:	Capsul:	38	lb.
PIMENTA		38	lb.
PIMENTÆ	Pulv:	50	lb.
PETROL:	Barbadens:	25	lb.
PIL: HYDRARG:	U. S. P.	1 25	lb.
PIPERINE		75	oz.
PIX	Abietis	16	lb.
	Canadensis	50	lb.
PLUMBI	Acetas	20	lb.
	Iodid:	1 00	oz.
	Nitras	50	lb.
POTASSA	Fusa (Caustic)	12	oz.
POTASSÆ	Acetas	12	oz.
	Arsenias	50	oz.
	Arsenis	12	lb.
	Bicarb: Cryst:	37	lb.
	Bitart: Pulv:	(scarce) 50	lb.

POTASSÆ Carb: (Sal: Tart:)		$0 15 per	lb.
Chloras		75	lb.
Citras	(scarce)	2 00	lb.
Nitras		12	lb.
Sulphas		16	lb.
Sulphas Pulv:		25	lb.
Tart:		50	lb.
POTASSII Bromid:		1 00	oz.
Cyanid:		12	oz.
Ferrocyan:		06	oz.
Ferricyan:		12	oz.
Iodid:		50	oz.
Sulphuret:		50	lb.
PREPARED CHALK (See Calcis Carb:)			
PULVIS Antimonialis		06	oz.
Aromat:		25	oz.
Doveri		20	oz.
Seidlitz		38	lb.
QUINIÆ Acetas		4 50	oz.
Arsenias		6 00	oz.
Citras		4 50	oz.
Ferrocyan:		4 50	oz.
Iodid:		6 00	oz.
Lactas		6 00	oz.
Murias		4 50	oz.
Sulphas		3 25	oz.
Tannas		4 50	oz.
Valerianas		1 00	dr.
RADIX Aconit. Contus		1 00	lb.
Actææ Racemos:		30	lb.
Arnicæ		1 00	lb.
Belladonnæ		1 50	lb.
Colchici, Eng:		50	lb.
Colombæ		20	lb.
" Pulv:		38	lb.
Curcumæ Opt: (Turmeric)		25	lb.
Gentianæ		12	lb.
Gent: Contus		20	lb.
" Pulv:		30	lb.
Geranii Maculat:		50	lb.
Glycyrrhizæ		10	lb.
" Pulv:		25	lb.
Hydrastis Canadensis		50	lb.
Ipecac:	(scarce)		lb.
" Pulv:	(scarce)		lb.
Irid: Florent:		25	lb.
" " Pulv.		38	lb.
Jalapæ		88	lb.
" Pulv:		1 00	lb.
Krameriæ		38	lb.
" Contus		50	lb.
" Pulv:		62	lb.
Pareiræ Bravæ		1 25	lb.
Rhei E. I——(best)	(scarce)	1 75	lb.
" Pulv:	(scarce)	2 00	lb.
Russic:		38	oz.

RADIX Rhei Russic: Pulv	$0 50	per oz
Sanguinariæ	50	lb.
" Pulv:	75	lb.
Sarsap: Contus:	28	lb.
Scillæ	25	lb.
" Pulv:	62	lb.
Senegæ (scarce)		lb.
Serpentariæ (scarce)	40	lb.
" Pulv:	50	lb.
Spigeliæ (scarce)	40	lb.
" Pulv:	50	lb.
Stillingiæ	1 15	lb.
Taraxaci	30	lb.
Tormentillæ	38	lb.
Valerianæ, Eng.	50	lb.
" " Pulv:	75	lb.
Zingib: Jamaic:	50	lb.
" " Pulv:	62	lb.
RESINA JALAPÆ	1 00	oz.
SACCHARUM LACTIS	60	lb.
SAGO PERLAT:	10	lb.
SAL: Rochelle:	38	lb.
Prunelle	38	lb.
SALACINE	75	oz.
SANGUIS DRACONIS	1 50	lb.
SANTONINE	1 75	oz.
SAPO Hispan:	18	lb.
Windsor (Brown)	12	cake.
SEIDLITZ POWDERS, in Tin Boxes	2 25	doz.
MIXTURE	38	lb.
SEMINA Anisæ	20	lb.
Cardam:	1 50	lb.
Cari	20	lb.
Chenopod: Anthelm:	25	lb.
Colchici	50	lb.
Coriandri:	15	lb.
Cydoniæ	25	oz.
Fœniculi	15	lb.
Lini	08	lb.
Sinapis	15	lb.
" Pulv: Eng:	38	lb.
SODÆ Acetas	12	oz.
Arsenias	50	oz.
Arsenis	12	oz.
Biboras	38	lb.
Bicarbonas	12	lb.
Carbonas	06	lb.
Nitras Ref:	25	lb.
Phosphas	50	lb.
et Potassæ Tart:	28	lb.
Sulphas	06	lb.
SOLANUM DULCAMARA	25	lb.
SP: Ammon:	25	pint.
" Arom:	50	pint.
Æther: Nit:	20	pint.
" Sulph: Comp:	30	pint.

SP: Lavand: Comp:	$0 50	per pint.
Vini Gallic: (4th proof French Brandy)	3 00	gal.
Lavand: Simp:	50	pint.
SPONGIA (Prepared for Surgical use) various prices		
STRYCHNIA	75	dr.
Sulph:	75	dr.
SULPHUR Rotund:	06	lb.
Sublimat:	10	lb.
Iodid:	75	oz.
Sublimat: Lot:	15	lb.
Præcip: Pur:	75	lb.
SYRUPUS Althææ	75	lb.
Allii	75	lb.
Acaciæ	50	lb.
Aurantii	50	lb.
Digitalis	50	lb.
Ferri Iodid:	1 50	lb.
" Citratis	1 50	lb.
Gallæ	50	lb.
Ipecac:	50	lb.
Limonis	3 00	doz.
Lobeliæ	50	lb.
Marrub Comp:	50	lb.
Morph: Sulph: (Jackson's)	75	lb.
Papaveris	50	lb.
Prun: Virg:	50	lb.
Rhamni Cathart: Ang:	1 00	lb.
Rhei	50	lb.
" Aromat:	50	lb.
Sarsap: Comp:	50	lb.
Scillæ	50	lb.
" Comp:	50	lb.
Simplex	25	lb.
Sennæ	50	lb.
Senegæ	50	lb.
Tolutani	50	lb.
Syrupus Zingiberis	50	lb.
TANNIN	31	oz.
TAPIOCA	25	lb.
TARTAR EMETIC (Vid: Ant: et Pott Tart:)		
TEREBINTHINA Venet:	30	lb.
TEST: OST: PRÆP:	75	lb.
TINCTURA Aconiti Fol:	50	pint.
" Rad: U. S. P.	10	oz.
" " (Flemings)	12	oz.
Aloes	50	pint.
" Comp;	50	pint.
" et Myrrhæ	50	pint.
Assafœtidæ	50	pint.
Arnicæ	50	pint.
Aurantii	50	pint.
Belladonnæ	50	pint.
Benzoin: Comp:	50	pint.
Buchu	50	pint.
Colombæ	50	pint.
Camphoræ	50	pint.

TINCTURA Cannab: Ind:	$0 12	per oz.
Cantharidis	50	pint.
Capsici	50	pint.
Cardam: Comp:	50	pint.
Castorei	1 50	pint.
" Ammon:	2 00	pint.
Catechu	50	pint.
Cinchonæ	75	pint.
" Comp:	75	pint.
Conii	50	pint.
Cubebæ	50	pint.
Digitalis	50	pint.
Ferri: Acet:	50	pint.
" Amar	50	pint.
" Chlorid:	50	pint.
Matico	06	oz.
Gent: Com:	50	pint.
Guaiaci	50	pint.
Guaiaci Ammon:	75	pint.
Humuli	50	pint.
Hyoscyami	50	pint.
Iodini	75	pint.
" Lugol's	75	pint.
Jalapæ	50	pint.
Kino	50	pint.
Krameriæ	50	pint.
Lobeliæ	50	pint.
Lupulinæ	50	pint.
Myrrhæ	50	pint.
Nuc: Vomicæ	50	pint.
Opii	75	pint.
" Acet:	1 00	pint.
Opii Camph:	50	pint.
Quassiæ	50	pint.
Rhei	50	pint.
" et Aloes	50	pint.
" et Gentianæ	50	pint.
Rhei et Sennæ	75	pint.
Sanguinariæ	50	pint.
Saponis Camph:	50	pint.
Scillæ	50	pint.
Sennæ Comp:	50	pint.
Serpentariæ	50	pint.
Tolutani	50	pint.
Valerianæ	50	pint.
Valer: Ammon:	75	pint.
Zingiberis:	50	pint.
TROCHES Menth: Pip:	75	lb.
Soda Carb:	75	lb.
Wistari, in Boxes	1 00	doz.
Zingiberis	75	lb.
UNGUENTUM Acid: Nitric:	50	lb.
Althææ	75	lb.
Aq: Rosæ (with Glycerine)	75	lb.
Cantharid: (for dressing Blisters)	1 00	lb.
Cucumis	1 00	lb.

UNGUENTUM Hufeland:	1 00	per lb.
Hydrarg: U. S. P. (half Mercury)	1 25	lb.
" Nitrat:	50	lb.
Picis Liquidæ	50	lb.
Sabinæ	50	lb.
Simplex	50	lb.
Stramonii	50	lb.
Sulphuris	50	lb.
VACCINE VIRUS	1 00	scab.
VERATRIA	88	dr.
VINUM Album	2 00	gall.
Antimonialis	50	pint.
VINUM Aromat:	1 00	pint.
Colchici Rad:	75	pint.
" " (English from recent root)	1 50	pint.
" Sem:	75	pint.
Ferri	50	pint.
Ipecac:	75	pint.
Opii	1 00	pint.
Picis	1 25	gall.
Rub:	2 00	gall.
Secale Cornut:	75	pint.
YEAST POWDERS, in Tin Boxes	2 25	doz.
ZINCI Acetas	12	oz.
Carb: Præcip:	12	oz.
Cyanid:	75	oz.
Chlorid:	25	oz.
Iodid:	1 00	oz.
Oxid:	06	oz.
Sulphas	25	lb.
Valerianas	50	dr.

MEDICINAL WARES,

PHYSICIANS' APPARATUS, ETC.,

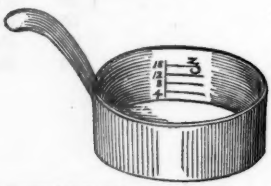
FOR SALE BY

BULLOCK & CRENSHAW,

N. E. CORNER ARCH AND SIXTH STREETS, PHILADELPHIA.

ADHESIVE PLASTER, ... $0 25 per yard.
" " in cans of 2 yards ½ width, . 0 50 per can.
BED PANS, round and slant, Queensware, . . 1 25 each.
" " India rubber, for inflation, . . . 2 25 each.

Fig. 1.



BLEEDING BOWLS, graduated (Fig. 1), . 0 75 each.

BOTTLES, Narrow Mouth, with Stoppers accurately ground,—

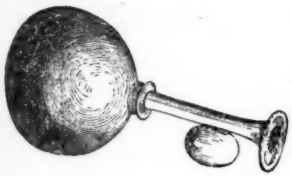
1 gallon,	7 00	per doz.
half gallon,	4 00	" "
quart,	2 38	" "
pint,	1 75	" "
half pint,	1 37	" "
4 oz.,	1 12	" "
2 oz.,	1 00	" "
1 oz.,	0 90	" "
half oz.,	0 90	" "

BOTTLES, Wide Mouth, with Glass Stoppers,—

gallon,	9 00	" "
half gallon,	4 50	" "
quart,	2 75	" "
pint,	2 00	" "
half pint,	1 50	" "
4 oz.,	1 25	" "
2 oz.,	1 00	" "
1 oz.,	0 90	" "
half oz.,	0 90	" "

BOTTLES, Strong Green Glass, with Glass Stoppers, for Acids,—
half gallon, ... $0 25 each.
quart, ... 0 19 "
pint, ... 0 15 "
half pint, ... 0 12 "
BOTTLES, Assorted, in Gross Boxes, see Vials.
BOXES, Chip Nested, 12 Nests in a paper, . . 0 15 paper.
" Paper, Chip Nested, English, . . 0 20 "
BOUGIES, Elastic, ... 1 25 per doz.
" " with Ivory tips, . . . 1 50 " "
" Metallic, ...
" Elastic (English, very superior), . . 0 75 each.
" Gutta Percha, French, ... 0 25 "
" Catgut, ... 0 12 "
" Wax, ... 0 12 "

Fig. 2.



BREAST EXHAUSTERS,
Elastic (Fig. 2), . $1 00 each.

Fig. 3.

BREAST PIPES (Fig. 3), $0 25 each.

BREAST PUMPS, ... $2 50 each.
BRUSHES, Cam. Hair, for Throat, . . 60 to 1 00 per doz.
CATHETERS, Elastic, ... 1 25 " "
" " with Ivory tips, . . . 1 50 " "
" " Silver—Male, . . . 1 25 each.
" " " Female, . . . 0 75 "
" " (English, very superior), . 0 75 "
" Gutta Percha, French, . . . 0 25 "
COLLODION, in oz. Stop. Bot., . . . 2 00 per doz.
CORKS, Bottle and Vial, all sizes, ...

Fig. 4.

CORK PRESSES (Fig. 4), $0 75 each.

Fig. 5.

CORK-SCREW (Fig. 5), . . 0 50 each.

Fig. 6.

CORK-SCREW (Fig. 6), . . 0 38 each.

Fig. 7.

CORK SCREWS (Fig. 7), . . . 0 25 each.

COURT PLASTER, ... 0 25 per doz.

Fig. 8.

CUPPING GLASSES (Fig. 8) . . 1 25 per doz

DOMESTIC INSTRUMENT for Self-Injection (Maws), 2 50 each.

EAR TUBES, Elastic (Horn mounted), . . . $1 75 each.
" " " (Ivory mounted), . . . 3 00 "

Fig. 9.

EYE-GLASSES, Green and White Glass (Fig. 9), . . . 0 20 each.

Fig. 10.

EVAPORATING DISHES, Fine Porcelain (Figure 10),

No. 00.	Contents 1 oz.,	. . . .	$0 12
0.	" 1½ oz.,	. . . .	0 15
1.	" 2 oz.,	. . . .	0 20
2.	" 3 oz.,	. . . .	0 25
3.	" 4 oz.,	. . . .	0 30
4.	" 5 oz.,	. . . .	0 35
5.	" 6 oz.,	. . . .	0 45
6.	" 12 oz.,	. . . .	0 55
7.	" pint,	. . . .	0 70
8.	" 1½ pints,	. . . .	0 90
9.	" 3 pints,	. . . .	1 50
10.	" 6 pints,	. . . .	2 25
11.	" 8 pints,	. . . .	3 00

EVAPORATING DISHES, Berlin Porcelain, 2d quality:—

No. 00.	Contents 2 oz.,	. . . .	0 12
0.	" 3 oz.,	. . . .	0 15
1.	" 4 oz.,	. . . .	0 18
2.	" 8 oz.,	. . . .	0 25
3.	" pint,	. . . .	0 35
4.	" 1½ pints,	. . . .	0 50
5.	" quart,	. . . .	0 75
6.	" 3 pints,	. . . .	1 00
7.	" half gallon,	. . . .	1 15
8.	" gallon,	. . . .	1 37
9.	" 1½ gallons,	. . . .	1 62
10.	" 2 gallons,	. . . .	2 00

EVAPORATING DISHES, Small, in Nests, ... 0 75
FINGER-STALLS of Gum Elastic, ... 0 75 per doz.
FILTERING PAPER, ... 0 25 per quire.

Fig. 11.

FUNNEL GLASS (Fig. 11):—

Half gallon,	. . .	$0 37
Quart,	. . .	0 25
Pint,	. . .	0 20
Half pint,	. . .	0 18
4 oz.,	. . .	0 15
2 oz.,	. . .	0 12
1 oz.,	. . .	0 12

Fig. 12.

FUNNELS, Porcelain, for Filtering Hot Liquids (Fig. 12):—

No. 4. Half gallon,	$1 25
3. Quart,	1 00
2. Pint,	0 75
1. Half pint,	0 62
0. 4 oz.,	0 38

Fig. 13.

FUNNELS, Porcelain, Perforated, for Draining (Fig. 13):—

No. 4. Half gallon,	$1 25
3. Quart,	1 00
2. Pint,	0 75
1. Half pint,	0 62
0. 4 oz.,	0 40

Fig. 14.

FUNNELS, Porcelain, with large holes for rapid Filtration (Fig. 14):—

No. 3. Quart,	$1 00
2. Pint,	0 75
1. Half pint,	0 50
0. 4 oz.,	0 38

Fig. 15.

FUNNELS, WEDGWOOD WARE (Fig. 15):—

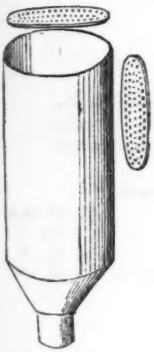
No. 3. ½ pint,	$0 38
5. pint,	0 62
7. quart,	1 12

Fig. 16.

FUNNELS, GLASS, with Stop Cock for separating fluids of different densities (Fig. 16):—

½ gall.	$3 00
quart,	2 50
pint,	2 00
½ pint,	1 75

Fig. 17.



FUNELS, QUEENSWARE, with Perforated Diaphragms for preparing Tinctures and Infusions by displacement (Fig. 17):—

½ gall.	$1 50 each.
quart,	1 25 "
pint,	1 00 "

GALLIPOTS, 1 to 4 oz. four in a nest, $0 08 nest.
GLASS, English, very thin, for Microscopic Preparations,
GOLD BEATERS, Skin, 0 75 doz.

Fig. 18.

GRADUATED MEASURES, Glass, accurate (Fig. 18):—

16 oz.	$1 25 each.
12 oz.	1 00 "
8 oz.	0 88 "
6 oz.	0 75 "
4 oz.	0 62 "
3 oz.	0 56 "
2 oz.	0 50 "
1 oz.	0 37 "

Fig. 19.

Minim (Fig. 19), $0 50 each.

HAIR GLOVES, $1 00 pair.
HAIR BELTS, 1 00 each.
HEIFERS' TEATS, 1 25 doz.
HORN SCOOPS, 1 50 "

Fig. 20.

HYDROMETERS, Baume's Scale (Fig. 20). These Hydrometers are made with great care by J. G. Grenier, a celebrated manufacturer in Berlin, and their entire accuracy may be relied on.

For acids, syrups, and liquids heavier than water, graduated from	0° to 68°, . . .	$3 25 each.
For Spirits,	10° to 49°, ...	3 25 "
For Ethers,	30° to 65°, ...	3 25 "
For Acids, Alcohol, and Ether, a good article,		1 00 "

Fig. 21.

HYDROMETER JARS, for floating Hydrometers (Fig. 21), ... $0 50 to $0 75

INFUSION MUGS, pint, ... $1 25

Fig. 22.

INJECTING BAGS, elastic (Fig. 22):—

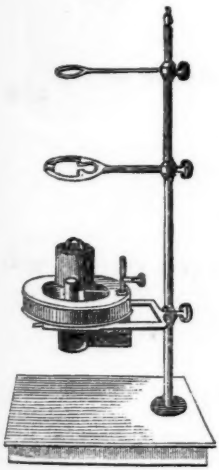
Female, ...	$1 25
Male, ...	1 00

INHALERS, for administering Chloroform, . . .	$0 75
" " Iodine, ...	0 38
ISINGLASS PLASTER (Husband's), ...	0 75 yd.
ISSUE PEAS, ...	0 38 hun'd.

JARS, QUEENSWARE, Covered, English:—

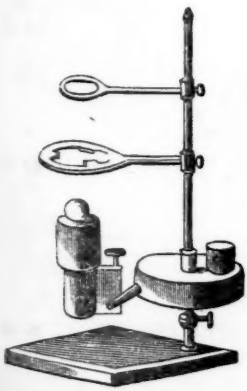
quart,	$0 38 each.
pint,	0 18
half-pint,	1 25 doz.
4 oz.	1 00
2 oz.	0 88
1 oz.	0 75
LABELS, Latin in books for shop furniture,	1 50
" " for specimens in Materia Medica,	0 50

Fig. 23.



LAMPS, SPIRIT, Berzelius' pattern (Fig. 23), ... $5 50

Fig. 24.



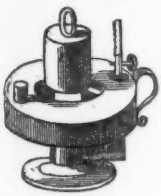
LAMPS, SPIRIT, Rose's pattern (Fig. 24), ... $5 50

Fig. 25.

LAMPS, SPIRIT, Glass, with Cap (Fig. 25) :—

6 oz.	$0 50
2 oz.	0 37

Fig. 26.

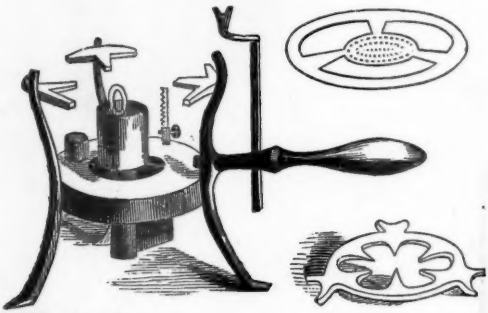


LAMPS, SPIRIT, with Screw to adjust the wick (Fig. 26), ... $4 50

Fig. 27.

LAMPS, SPIRIT, Mitchell's, Tin (Fig. 27), . $0 75

Fig. 28.



LAMPS, SPIRIT, Luhme's Pharmaceutical (Fig. 28), $6 00

LINT, best Linen, ... $1 25

Fig. 29.

MARSHE'S ARSENIC APPARATUS (Fig. 29), . $2 50

MEDICINE CHESTS, furnished to order.

MORTARS, GLASS:—

2 oz.	$0 35
4 oz.	0 50
6 oz.	0 75

Fig. 30.

MORTARS, IRON (Fig. 30):—

No. 1, half-pint,	$0 37
2, pint,	0 50
3, 1½ pint,	0 62
4, quart,	0 87
5, 3 pints,	1 00
6, half-gall.	1 37
7, 1 gall.	2 00

Fig. 31.

MORTARS, WEDGWOOD (Fig. 31):—

No. 000, 2 oz.	$0 37 each.
00, 3 oz.	0 40
0, 4 oz.	0 50
1, 6 oz.	0 56
2, 8 oz.	0 75
3, 12 oz.	0 88
4, pint,	1 12
6, quart,	1 50
8, half-gall.	2 50

Fig. 32.

NIPPLE GLASSES (Fig. 32), 1 00 doz.

NIPPLE SHIELDS, wooden, 1 25

Fig. 33.

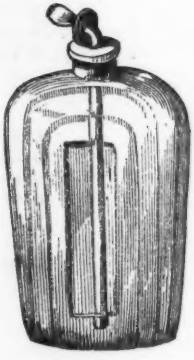
NIPPLE SHIELDS, with gum tip (Fig. 33), $0 25 each.

Fig. 34.

NIPPLE SHIELDS, METALLIC (Fig. 34), $0 20 each.

NURSING BOTTLES, glass, oval, flat, . . . $0 20 each.

Fig. 35. Fig. 36.



NURSING BOTTLES, glass, with Britannia tubes, bent and straight (Figs. 35 and 36), . . $0 37 each.

Fig. 37.

NURSING CUPS (half covered), (Fig. 37), $0 25 ea.

OILED SILK, ... $1 00 yard.

PALETTE KNIVES, see Spatulas.

PAPER, WRAPPING, all kinds.

Fig. 38.

PESSARIES, GLASS, Disk (Fig. 38), . . $2 50 doz.

Fig. 39.

PESSARIES GLASS, Globular (Fig. 39), . 2 50 "

Gum elastic, various kinds.

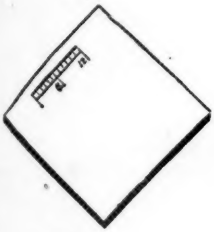
PLASTER IRON, ... $1 00 each.

PLASTERS—Spread, Hemlock, Burgundy Pitch, Warming, and Strengthening :—

No. 1. 4 by 6, ... $1 00 doz.
2. 5 by 8, ... 1 50
3. 6 by 10, ... 2 00

PILL MACHINES, Brass for 12 pills, . . . $3 50
" " 24 " . . . 5 50

Fig. 40.



TILES, Graduated (Fig. 40), . $0 50 to $1

Fig. 41.

TILES, Plain (Fig. 41), . $0 50 to $1 00

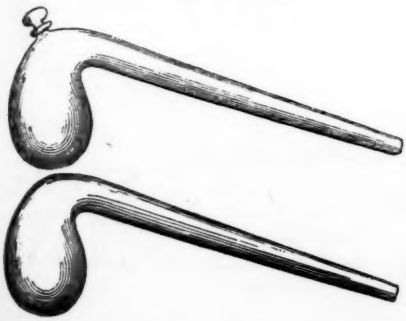
POCKET CASES for Medicines, morocco, containing 10 bottles, . $1 50
POCKET CASES for Medicines, of various sizes, containing from 12 to 24 bottles, ... from $1 50 to $2 50

Fig. 42.

PRECIPITATING JARS (Fig. 42):—

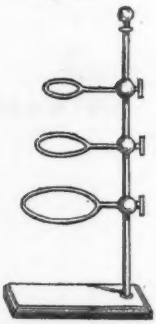
Half gallon, ...	$0 62
Quart, ...	0 37
Pint, ...	0 31
Half pint, ...	0 25

Figs. 43 and 44.



RETORTS, GLASS, Plain and Tubulated, 1 oz. to 1 gallon (Figs. 43 and 44), $0 19 to $1 25

Fig. 45.



RETORT STANDS, Iron, with 3 rings, (Fig. 45), . . . $1 50

SADDLE-BAGS furnished to order.

SIEVES, Bolting Cloth, for very fine powders, 7 inch, $0 37

SPATULAS, Steel, English,—

8 inch,	0 50	
7 inch,	0 38	
6 inch,	0 31	
5 inch,	0 25	
4 inch,	0 19	
3 inch,	0 15	

SPATULAS, Porcelain, for Acid Ointments,—

4 inch,	0 31	each.
6 inch,	0 38	"
9 inch,	0 60	"

Fig. 46.

SCALES AND WEIGHTS, Eng., (Fig. 46), . . . $1 25

Fig. 47.

SPECIE JARS, with Covers (Fig. 47):—

1 gallon,	$5 00	per doz.
Half gallon,	3 00	" "
Quart,	2 00	" "
Pint,	1 75	" "
Half pint,	1 00	" "

Fig. 48.

SPECIFIC GRAVITY BOTTLES, holding 1000 Grains of Distilled Water, with Perforated Stopper and Counterpoise Weight, (Fig. 48), ... $3 50

SPEC. GRAV. BOTTLES, holding 100 grains Distilled Water as above, ... $2 00

Fig. 49.

SPEC. GRAV. BOTTLES, holding 1000 grains Distilled Water, without Stopper mark on Neck (Fig. 49), ... $1 50

SHEEPSKINS, various kinds.

SPONGE, Prepared for Surgical use, various kinds.

Fig. 50.

SPERMATORRHŒAL RINGS. (Fig. 50.)

Fig. 51.

SPECULUMS FOR UTERUS,
Glass (Fig. 51), . $0 50 each.
Metallic, . . .

Fig. 52.

SPECULUMS FOR UTERUS, Glass, covered with Silver, and re-coated with Gutta Percha (Fig. 52), . $1 50 each.

SPECULUMS FOR UTERUS,
Coated as above, and with aperture in side, . $1 50 each.
German Silver, Bivalve, . . . 4 00 "
" " " Handles detached, . 4 50 "
" " Trivalve, . . . 5 00 "
" " Quartovalve, ... 9 00 "
" " for Anus, . . . 4 00 "
" " for Ear, ...

Fig. 53.

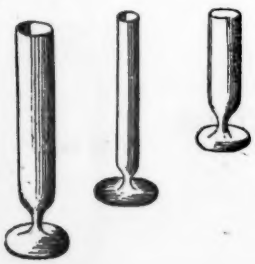
SPITTING CUPS, Queensware, with Movable Tops (Fig. 53), . . $0 50 each.

STETHOSCOPES, Cedar, plain, ... $0 50 each.
" " Ivory mounted, . . 0 75 "
" Ebony, plain, ... 0 62 "
" " Ivory mounted, . . 0 88 "
" Ivory mounted, with Pleximeter, . 1 50 "
STOMACH TUBES, ... 1 00 "
SUSPENSORY BANDAGES, Silk and Cotton, . 0 25 to 0 75 "

Fig. 54.

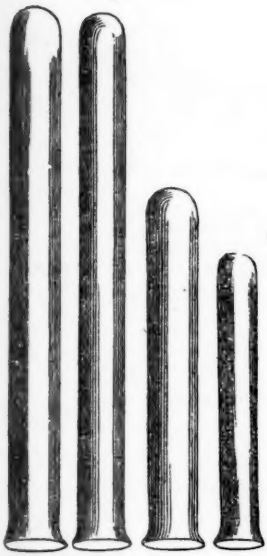
SYRINGES, Glass, Male and Female (Fig. 54).
Metal Capped, Small, . . . $1 25 per doz.
" " Medium, . . 1 50 " "
" " Large, . . . 2 50 " "
Glass, curved, for Uterus, . . 4 00 " "
" " for Ear, . . . 3 00 " "

Fig. 55.



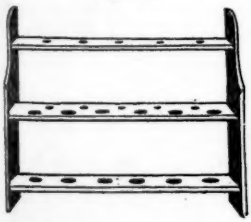
TEST TUBES, ON FOOT,
Large (Fig. 55), . $1 00 each.
Medium, . 0 75 "
Small, . . 0 62 "
Assorted, . 0 75 "
For Arsenic, assorted, 1 00 "

Fig. 56.



TEST TUBES, Glass, Large,
(Fig. 56), . $0 75 each.
Medium, . . 0 50 "
Small, . . 0 37 "

Fig. 57.



TEST TUBE RACKS, White Wood, for 13 tubes (Fig. 57), $0 75

Fig. 58.

TEST GLASSES, French Pattern (Fig. 58), . $1 00 per doz.

THERMOMETERS, in Japanned Tin Frames,
7 inch, ... $0 62 each.
8 inch, ... 0 75 "
10 inch, ... 0 88 "
12 inch, ... 1 00 "

Fig. 59.

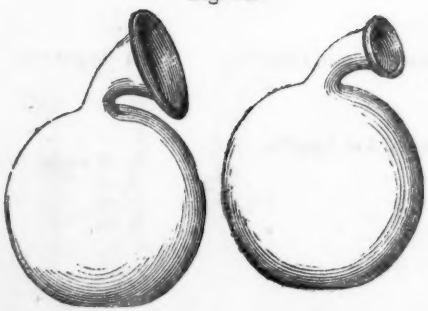
THERMOMETERS, Small, on Ivory Scale, with Bulb projecting below the Scale, graduated from 50° to 140° F. (Fig. 59), . $1 50 each.
Chemical (various kinds), . $2 00 to 6 00 "

TONGUE DEPRESSERS, Pearl, ... $0 75 each.
TWINE, LINEN, Fine, ... 0 20 per ball.
" " Coarse, ... 0 37 " "
TEST PAPERS, Red and Blue, Litmus and Turmeric, 0 06 per sheet.
URINALS, GLASS, Male, ... 0 38 each.

Fig. 60.

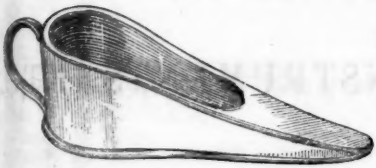
URINALS, GLASS, Female (Fig. 60), . $0 38 each.

Fig. 61.



URINALS, Queensware, male and female (Fig. 61), $0 50 each.

Fig. 62.



URINALS, Female,
Slipper Pattern,
Large (Fig. 62), $1 38 each.
Medium, . 1 25 "

Fig. 63.

URINOMETERS, for ascertaining the Specific Gravity of Urine; Glass, containing a delicate Ivory Scale, very accurate (London), (Fig. 63). . $3 00 each.

Fig. 64.

URINOMETER CASES, containing Urinometer and Graduated Glass for floating it, a delicate Thermometer, and Test Papers, complete (Fig. 64), . $5 00 each.

WATCH GLASSES, for Use as small Evaporating Dishes, $0 75 per doz.
VIALS, Assorted, octagonal, from ½ oz. to 8 oz., in gross boxes, 2 75 per gross.
" " Plain, long, from ½ oz. to 8 oz., in gross boxes, ... 2 25 " "

SURGICAL INSTRUMENTS, ETC.

AMPUTATING.

1 CAPITAL SAW,
1 METACARPAL SAW,
2 CAPITAL KNIVES,
1 CATLINE KNIFE,
1 PAIR ARTERY FORCEPS, with Slider,
1 SCALPEL, Steel Handle,
1 PAIR BONE NIPPERS,
1 TOURNIQUET,
12 CURVED NEEDLES,
1 TENACULUM,

$17 00 each.

In a neat Mahogany Case, Brass mounted.

TREPANNING.

2 TREPHINES,
1 ELEVATOR,
1 HEY'S SAW,
1 SCALPEL, with Raspiter,
1 BRUSH,

$10 00 each.

In a neat Mahogany Case, Brass mounted.

MIDWIFERY.

1 PAIR FORCEPS,
1 VECTIS,
1 CROTCHET,
1 PERFORATING SCISSORS,
1 BLUNT HOOK,

$10 00 each.

In a neat Leather case.

DISSECTING.

6 SCALPELS,
1 SINGLE HOOK,
1 DOUBLE HOOK, with a Joint,
1 PAIR FORCEPS,
1 SILVER BLOW PIPE,
1 PAIR SCISSORS,

$3 50 each.

In a neat Mahogany or Morocco Case.

EYE INSTRUMENTS.

2 KNIVES,
1 IRIS KNIFE,
2 NEEDLES, Curved and Straight,
1 CURETTE AND HOOK,
1 SILVER SPECULUM,
1 PAIR FORCEPS,
1 PAIR CURVED SCISSORS,

$9 00 each.

In a neat Case.

CASE OF EXTRACTING INSTRUMENTS.

WITH IVORY HANDLES.

1 FOX'S SPRING BOLT KEY,
2 PAIR TEETH FORCEPS, Curved and Straight, Double Joints,
1 TOOTH PUNCH,
1 GUM LANCET,

$4 50 each.

In a neat Leather Case.

With Ebony handles, ... $3 75.

POCKET INSTRUMENTS, NO. I.

1 PAIR CROOKED SCISSORS,
1 PAIR STRAIGHT "
1 PAIR DRESSING FORCEPS,
1 PAIR DISSECTING FORCEPS,
1 DIRECTOR,
1 SPATULA,
2 SILVER PROBES,
1 TONSIL FORCEPS,
1 CURVED Probe-Pointed BISTOURY,
1 Large SCALPEL,
1 GUM LANCET,
1 ABSCESS LANCET,
1 TENACULUM,
1 Small SCALPEL,
1 STRAIGHT SPEAR BISTOURY,
1 SILVER FEMALE CATHETER,
1 PHYSICK'S FORCEPS AND NEEDLE,
1 THUMB LANCET,
6 CURVED NEEDLES,

$8 00 each.

In a neat Morocco Case, with a Lock.

POCKET CASES, similar to No. 1, containing a Silver Male and Female Catheter, extra heavy, $10 00 each.

PHLEBOTOMY.

SILVER SPRING LANCET, Button Trigger,	$3 50 each.
" " Lever,	3 00
BRASS " " "	0 75
BRASS HORSE " "	1 50
THUMB LANCETS,	0 38
" French (Charriere's),	0 75
" English Crown (Evan's),	0 75
LANCET PHLEMES,	0 12
IMITATION SILVER SPRING LANCETS,	1 50
" " " Button Trigger,	2 00

AMPUTATING AND TREPANNING.

In one Case, ... $26 00 each.

CUPPING INSTRUMENTS.

1 BRASS PUMP, or EXHAUSTER,
5 CUPPING GLASSES, } $ 3 50 each.

In a neat Mahogany Case.

With German SCARIFICATOR,	$5 50 each.
With American "	7 00 "
CUPPING INSTRUMENTS, as above, with stopcocks to glasses,	4 50 "
" with German SCARIFICATOR,	6 50 "

SURGICAL INSTRUMENTS OF ALL KINDS,
FURNISHED TO ORDER.

MISCELLANEOUS.

SCARIFICATORS, American,	$3 50 each.
" small,	3 50 "
" German Silver,	4 00 "
" German,	2 00 "
OBSTETRICAL FORCEPS, Hodge's,	5 00 "
" " Huston's,	5 00 "
" " Heighton's,	5 00 "
" " Davies',	5 00 "
BRASS CUPPING AND STOMACH PUMP, with Injecting Apparatus and 6 Glasses combined, Mahogany case,	10 00 "
BRASS STOMACH PUMP and Injecting Apparatus combined, in a Mahogany case,	7 00 "
BRASS ANATOMICAL SYRINGE, 36 oz. with 7 pipes,	16 00 "
1 BRASS PUMP and Breast Glass, in a neat Case,	3 25 "
PROBANGS, Bent and Straight,	0 38 "
ANNELL'S SYRINGE for Eye (Silver), with Straight and Bent Gold Paper, in neat Morocco Case,	8 00 "
TONSIL INSTRUMENTS, Physick,	5 00 "
METALLIC SOUNDERS (Mayo's),	0 75 "

METALLIC SYRINGES, BEST QUALITY.

24 oz.	Self-Injecting,	in Cases,	$2 25 each.
16 oz.	"	"	1 50 "
10 oz.	"	"	1 25 "
6 oz.	not Self-Injecting,	in Cases,	0 75 "
24 oz.	"	no Cases,	1 75 "
16 oz.	"	"	1 25 "
10 oz.	"	"	0 75 "
6 oz.	"	"	0 56 "
4 oz.	"	"	0 38 "
2 oz.	"	"	0 31 "
1 oz.	"	"	0 15 "
Maw's Self Apparatus,			2 25 "

METALLIC SYRINGES, MEDIUM QUALITY.

24 oz.	Self-Injecting,	in Cases,	$1 75 each.
16 oz.	"	"	1 25 "
10 oz.	"	"	1 00 "
6 oz.	not Self-Injecting,	in Cases,	0 56 "
24 oz.	"	no Cases,	1 25 "
16 oz.	"	"	1 00 "
10 oz.	"	"	0 62 "
6 oz.	"	"	0 38 "
4 oz.	"	"	0 31 "
2 oz.	"	"	0 25 "
1 oz.	"	"	0 12 "

METALLIC SYRINGES, THIRD QUALITY.

24 oz.	Self-Injecting,	in Cases,	$1 00 each.
16 oz.	"	"	0 88 "
10 oz.	"	"	0 75 "
6 oz.	not Self-Injecting,	in Cases,	0 38 "
24 oz.	"	no Cases,	0 75 "
16 oz.	"	"	0 62 "
10 oz.	"	"	0 50 "
6 oz.	"	"	0 31 "
4 oz.	"	"	0 25 "
2 oz.	"	"	0 20 "
1 oz.	"	"	0 10 "

WOMB SYRINGES, BEST QUALITY.

6 oz.	Ring Handles,	in Cases,	$1 00 each.
6 oz.	Wood "	"	1 00 "
4 oz.	Ring "	"	0 90 "
4 oz.	Wood "	"	0 90 "
2 oz.	Ring "	"	0 75 "
2 oz.	Wood "	"	0 75 "
Doctor Chase's Vagina, with Cases,			1 12 "
Female,			0 15 "
Male,			0 10 "
Ear, with Ivory Pipe,			0 31 "

Fig. 65.

SYRINGES, FRENCH, SELF-ACTING. The liquid is introduced at once into the Syringe, dispensing with any other vessel. The force, quantity, and direction of the current is regulated by the stop-cock and flexible tube at the bottom (Fig. 65).

No. 1.	Contents 12 oz.,	$5 00	each.
2.	" 20 oz.,	6 00	"
3.	" 30 oz.,	7 00	"

SKELETONS.

IN NEAT BOXES, WITH LOCK AND KEY.

SKELETONS, Articulated and Bleached,	$40 00	each.
SKELETONS, Articulated, not Bleached,	30 00	"
SKELETONS, Disarticulated and Bleached,	20 00	"
SKELETONS, Disarticulated, not Bleached,	15 00	"
HEADS—Sawn and furnished with movable Articulations. The sections exhibiting the Nasal, Frontal, and Sphenoidal Sinuses, and the Antrum Maxillare. Also, the Internal Ear, with apparatus, bones, muscles, memb. tympani, nerves and vessels. A complete and beautiful preparation,	18 00	"
HEADS—Disarticulated. The bones separated, and contained in the compartments of a pasteboard box,	10 00	"
HANDS and FEET Articulated on Catgut. The bones can be separated on the strings, so as to admit of the inspection of each. By drawing the string they are all brought into position,	2 50	"
FEMALE PELVIS, with Ligaments,	10 00	"
FŒTAL HEADS,	2 00	"

ANATOMICAL PREPARATIONS

OF ALL KINDS, IMPORTED TO ORDER.

We subjoin a list of a few, with the cash prices for importing to order. When the order amounts to one hundred dollars or more, it will be imported immediately, otherwise it will be retained on hand until we are getting other goods from Paris, which will probably be several times a year.

HEADS, entire, Articulated,	$5 00 to $8 00
" " Disarticulated,	6 00 to 10 00
" " " and remounted with the bones separated by short intervals (style Beauchene),	50 00

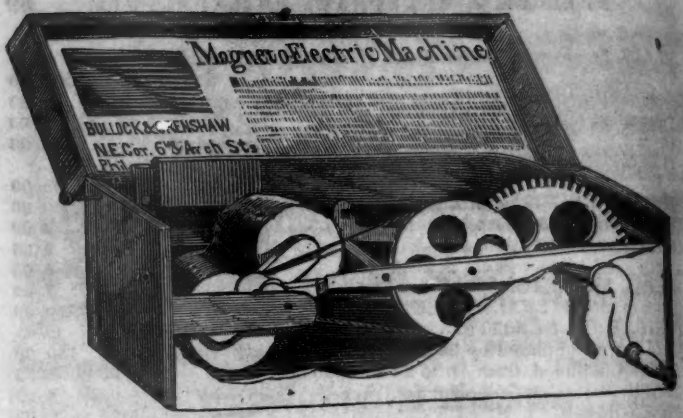
HEADS, Sawn, with preparations of internal and middle ear,	$15 00
" " with horizontal and vertical Sections,	8 00
Preparation of the INTERNAL EAR,	5 00
" " MIDDLE EAR,	3 00
14 TEMPORAL BONES, demonstrating the History of the Ear,	55 00
FEMALE PELVIS, with Ligaments,	8 00 to 10 00
FŒTAL HEADS,	2 00
HANDS or FEET, Articulated,	1 50 to 2 00
" " (style Beauchene),	6 00
FŒTAL SKELETONS,	7 00
Series of nine FŒTAL SKELETONS,	50 00
HISTORY OF DENTITION, from the fœtal conditions to old age, exemplified by 22 Preparations under Glass,	150 00
JAW in Childhood, from 1st to 2d Dentition,	6 00 to 8 00
TEETH, Natural, a Complete Set, Wired,	6 00 to 8 00
PHRENOLOGICAL HEADS (Natural),	7 00 to 8 00
HEADS OF CHILDREN during 1st and 2d Dentition,	8 00
SAWN HEADS, upon Supports, under Glass,	10 00
FŒTUS, Disarticulated, within a Frame,	10 00
MANIKINS, for the Study of the Mechanism of Labor,	30 00 to 50 00
HEADS, with Nerves, Arteries, and Veins,	60 00
HALF FACE, Vertical Section, with 5th pair of Nerves,	10 00
" " Arteries, Internal Maxillary,	10 00
EAR, with its Dependencies, Nerves, and Vessels,	10 00
HEAD, with Preparations of the Dura Mater,	10 00

AN ASSORTMENT OF THE SKELETONS OF ANIMALS.

HEADS OF ANIMALS, Disarticulated and Mounted, in the style of Beauchene, &c., &c.

CHESTS containing a complete set of PURE CHEMICAL REAGENTS, with the necessary Apparatus for Chemical Analysis.
Also, CHESTS for TOXICOLOGICAL Research, arranged to order.

Terms, CASH, with 5 per cent. discount, or Credit with approved reference.



MAGNETO-ELECTRIC MACHINES,

FOR

MEDICAL PURPOSES.

THESE machines operate without acids. The power is derived from a permanent magnet, and can be regulated from a weak current to one of an intensity sufficient for all medical purposes.

The machine operates simply by turning a crank. The electric current is applied by means of flexible wires connecting with insulated handles.

These batteries are the most approved form in use; they have received the sanction of the professors of most of our medical schools, and are used by many of our eminent city practitioners.

In cases of Neuralgia, Rheumatism, Paralysis, and Narcotic Poisoning, they have been eminently successful.

The batteries are contained in a neat mahogany box, with lock and key.

PRICE $10 NETT.